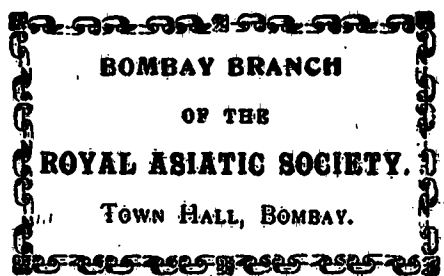




00133552



REPORT

OF THE

BOMBAY CHAMBER OF COMMERCE

FOR THE



YEAR 1882-83.

PRESENTED TO THE ANNUAL GENERAL MEETING
HELD ON THE 19TH DECEMBER, 1883.



BOMBAY:

PRINTED FOR THE CHAMBER AT THE
BOMBAY GAZETTE STEAM PRESS, RAMPART ROW, FORT.

1884.

B O M B A Y :

PRINTED AT THE BOMBAY GAZETTE STEAM PRESS, RAMPART ROW, FORT.



00133552

CONTENTS.

Members, &c., of the Chamber.	PAGE	
Holidays under Charter-Parties for the Year 1884	3	
Holidays sanctioned by Government for the Year 1884	4	
Rules and Regulations of the Chamber	5	
Rules for the Election of Port Trustees	8	
Committees of Arbitration	9	
Rules and Regulations for the Measurement by Callipers upon Exports from Bombay of Cotton, Wool, Hemp, and other Pressed Bales	10	
General Rates of Commission	12	
Ship Freight Inwards to Bombay	14	
Ship Freight Outwards from Bombay	14	
Ante-Dating Bills of Lading	15	
Shut-Out Cargo	15	
Detention of Cargo Boats alongside Vessels	15	
Tonnage Scale at Bombay (Steamers and Ships)	16	
Scale of Landing Charges	21	
Bombay Port Trust—		
Bye-Laws for the Regulation and Management of the Wet Docks of the Bombay Port Trust	24	
Rules for the Transport and Storage of Merchants' Gunpowder and other Explosives	35	
Pilotage Rules	42	
Rates to be charged at the Prince's Dock	56	
Rules for guiding Issue of Warrants, Charges, &c.	75	
Scale of Wharfage, Cranage, and other Fees to be charged at Port Trust Bunders	78	
General Meetings in 1882-83	95	

Report
page Appen-
 dix
 page

ANNUAL REPORT OF THE COMMITTEE—

Grain Rates from Agra and Delhi to Bombay by the B. B. & C. I., and the Rajputana-Malwa State Rail- way	155	229
Grain Rates of the G. I. P. Railway Company	157	243
The Indian Wheat Trade	162	280
Cultivation and Admixture of Wheat with Dirt and Inferior Grains	165	314

	Report page	Appen- dix page
Quality of Indian Wheat	169	341
Wheat Cultivation in the Punjab	169	377
Reduced Railway Rates and Suez Canal Dues for Wheat. 170		383
Petroleum Legislation in India	171	387
Railway Rates for the Carriage of Petroleum	174	408
Increased Dock Accommodation	174	416
Dry Dock Accommodation in the Port	176	423
Wadwan Station Cotton Market	177	427
Improvement and Cultivation of Cotton in the Dharwar Collectorate	178	431
Cultivation of different kinds of Cotton in the Khandeish Collectorate	179	435
Alterations in the Tonnage Scale	180	444
Additions and Alterations in the Tonnage Scale	182	...
Uniform Tonnage Scale at all the Indian Ports	183	450
The Port Trust, 1883-84	183	462
Reduction of Port Dues	184	...
The Rate of Interest payable by Government on the Port Trust Debt	184	468
Working of the Coal Trade on the Bunders	187	493
Quarantine in Egypt	188	500
The Customs Tariff of Mozambique	191	508
Tasar Seri-Culture in the Bombay Presidency	193	518
Proposed New Suez Canal	193	...
Principles on which Awards were based on Cases sub- mitted to the Chamber for Arbitration under the Rules passed on the 3rd August 1880... ..	194	...
Criminal Procedure Code, 1882, Amendment Bill ..	195	524
Jail Manufactures	197	...
Samples of Mahableshwar Arrowroot	197	533
Water Supply in Bombay	198	..
The Indian Explosives Bill, 1883... ..	198	536
The Indian Steam-Ships Bill, 1883	198	546
The Inland Steam Vessels Bill, 1883	199	554
Postal Arrangements between Bombay and Karachi ...	199	562
Proposed Line of Railway from Godra to Rutlam ...	201	574
Extension of the Bhopal State Railway Through Lalitpur and Jhansi to Gwalior with a Branch from Jhansi to Cawnpore	202	582
The Nagpur-Bengal Railway	204	603
The Jhansi-Manickpore Railway	205	626
Trade and Commerce of Macedonia	206	630
Introduction of Egyptian Cotton into India	207	635
Export Trade in Mowra Flowers	208	637
Working in the Harbour on Sundays	208	...

CONTENTS.

v

	Report page	Appen- dix page
Proposal to establish a Signal-Station as far distant from Bombay as possible from which the earliest intelligence might be received of Ocean-going Vessels approaching Bombay	209	...
A Fair Day's Discharge for American Petroleum Vessels.	211	...
Growth of Tobacco in the Kaira District	211	...
Government of India's Proposal to introduce a Unified Stamp of the Value of One Anna for Postage and Re- venue purposes... ..	212	639
Short Lengths and the Stamping of Local-made Piece- Goods	213	...
Alterations in the Prince's Dock Rules	214	...
G. I. P. Railway Rates for the Carriage of Full-pressed Bales of Piece-Goods and Yarn	216	...
Sailing Ship Bill of Lading Homewards	216	647
Stock Notes	217	652
Professional Costs of successful Parties in the Small Causes Court in Suits under present existing Jurisdic- tion	218	661
Application of the Famine Insurance Fund as a Fund with which to raise Loans for the Construction of Rail- ways	219	664
Bank Holidays	221	...
Elections of Port Trustees	221	...
Election of Deputy Chairman of the Chamber in place of Mr. F. Forbes Adam, resigned	222	...
Quotations of Exchange, Discount, Government Secu- rities and Freight, and of the Prices of the principal Articles of Import and Export during the year 1883 ..	222	670
Returns of Rainfall	222	...
Calcutta International Exhibition	222	...
Miscellaneous	226	..
Statement showing the Total Measurement of Bales and Miscellaneous Packages, with Receipts, Expendi- ture, &c.	227	...
Statement showing the Number of Miscellaneous Pack- ages only, with Receipts therefrom measured during the last six years	227	...
Funds of the Bombay Chamber of Commerce	228	...
Working Days under a Charter-Party	...	696

CONTENTS OF APPENDICES.

PAGE

A.—FUNDS OF THE BOMBAY CHAMBER OF COMMERCE FOR 1882-83 	228
--	-----

B.—GRAIN RATES FROM AGRA AND DELHI TO BOMBAY BY THE B. B. & C. I., AND THE RAJPUTANA-MALWA STATE RAILWAY.

From the Bombay Chamber of Commerce to Secretary to Government, Public Works Department (Railways), Bombay, dated 19th February, 1883 	229
From Under-Secretary to Government of Bombay, Public Works Department (Railway), to Secretary Bombay Chamber of Commerce, dated 2nd March, 1883 	232
Copy of Resolution of Government of Bombay, P. W. Department (Railway), dated 2nd March, 1883... 	232
From Under-Secretary to Government of Bombay, Public Works Department (Railway), to Secretary Bombay Chamber of Commerce, dated 13th March, 1883 	237
Letter from Government of India, dated 2nd March, 1883, to the Bombay Government 	237

C.—GRAIN RATES OF THE G. I. P. RAILWAY COMPANY.

From Bombay Chamber of Commerce to Agent G. I. P. Railway Company, dated 19th April, 1883 	243
From Secretary G. I. P. Railway Company to Secretary Bombay Chamber of Commerce, dated 20th April, 1883 	248
From Secretary Bombay Chamber of Commerce to Secretary to Government of Bombay, Public Works Department (Railways), dated 24th April, 1883 	248
From Under-Secretary to Government of Bombay, Public Works Department (Railways), to Secretary Bombay Chamber of Commerce, dated 2nd May, 1883 	248
From do. do. to do. do. dated 24th May, 1883... 	249
From Officiating Under-Secretary to Government of India, Public Works Department (Railway Traffic), to Secretary to Government of Bombay, Public Works Department, dated 9th May, 1883 	249
From Agent G. I. P. Railway Company to Secretary Bombay Chamber of Commerce, dated 4th June, 1883 	249

	PAGE
From Board of Directors G. I. P. Railway Company to Under-Secretary of State for India, dated London, 20th April, 1883	250
From Bombay Chamber of Commerce to Agent G. I. P. Railway Company, dated 17th October, 1883	256

D.—THE INDIAN WHEAT TRADE.

Pamphlet published at Calcutta entitled "The Influence of English Trade and American Protection by the Development of India."	280
From Secretary Bengal Chamber of Commerce to Secretary Bombay Chamber of Commerce, dated 15th March, 1883	303
From Secretary Bengal Chamber of Commerce to H. E. the Viceroy and Governor-General of India, dated 10th March, 1883	303
Letter accompanying the above Pamphlet, addressed by the Bombay Chamber of Commerce to the various Chambers of Commerce in England and to Prominent Public Men interesting themselves in Indian Affairs, dated 9th July, 1883	307
From Secretary to Government of Bengal, Public Works Department, to Secretary Bombay Chamber of Commerce, dated 17th August, 1883	310
From Secretary to Government, N.-W. Provinces and Oudh, to Secretary Bombay Chamber of Commerce, dated 22nd August, 1883	311
From Secretary Bengal Chamber of Commerce to Secretary Bombay Chamber of Commerce, dated 6th August, 1883	311
From Secretary Liverpool Incorporated Chamber of Commerce to Secretary Bombay Chamber of Commerce, dated 7th August, 1883	311
From Joint-Secretary to Government of Bombay, Public Works Department (Railway), to Secretary Bombay Chamber of Commerce, dated 21st December, 1883	311
From Secretary of State for India to H. E. the Right Hon'ble the Governor in Council, Bombay, dated London, 29th November, 1883	312
From Secretary Bombay Chamber of Commerce to Secretary to Government of Bombay, Public Works Department (Railway), dated 10th January, 1884	312
From Joint-Secretary to Government of Bombay, Public Works Department (Railway), to Secretary Bombay Chamber of Commerce, dated 10th January, 1884	313

E.—CULTIVATION AND ADMIXTURE OF WHEAT WITH DIRT AND INFERIOR GRAINS.

Extract from the Financial Statement of the Government of India for 1883-1884	314
---	-----

	PAGE
From Secretary Bombay Chamber of Commerce to Secretary to Government of Bombay, Revenue Department, dated 7th June, 1883	322
Resolution of Government of Bombay, Revenue Department, dated 23rd June, 1883	323
From Secretary Bombay Chamber of Commerce to Secretary to Government of Bombay, Revenue Department, dated 30th June, 1883	323
From Secretary Bombay Chamber of Commerce to Secretary Bengal Chamber of Commerce, dated 2nd July, 1883...	324
From Secretary Bombay Chamber of Commerce to Secretary Kurrachee Chamber of Commerce, dated 2nd July, 1883	324
From Secretary Bengal Chamber of Commerce to Secretary Bombay Chamber of Commerce, dated 6th August, 1883	325
From Secretary Bengal Chamber of Commerce to Secretary to Government of India, Department of Agriculture, dated 24th July, 1883...	325
From Chairman Kurrachee Chamber of Commerce to Secretary Bombay Chamber of Commerce, dated 11th July, 1883	326
From Chairman Kurrachee Chamber of Commerce to His Honor the Lieutenant-Governor of the Punjab, dated 17th February, 1883	326
Resolution of Government of Bombay, Revenue Department, dated 2nd August, 1883	328
From Commissioner, S. D., to Secretary to Government of Bombay, dated 6th July, 1883	329
From Bombay Chamber of Commerce to Under-Secretary to Government, Revenue Department, dated 2nd October, 1883	331
Resolution of Government of Bombay, Revenue Department, dated 29th November, 1883	335
From Secretary Bombay Chamber of Commerce to Acting Under-Secretary to Government of Bombay, Revenue Department, dated 20th December, 1883	339
From G. F. Sheppard, Commissioner, N. D., to the Collector in Guzerat, dated 3rd November, 1883	339

F.—QUALITY OF INDIAN WHEAT.

From Officiating Under-Secretary to Government of India, Revenue and Agricultural Department, to Secretary Bombay Chamber of Commerce, dated 25th August, 1883	341
Resolution of Government of Bombay, Revenue Department, dated 24th September, 1883	341
Report on Indian Wheat, prepared at the Request of H. M.'s Secretary of State for India, by Messrs. McDougall Brothers, well-known Steam Millers of 10 Mark Lane, London, dated London, 15th December, 1882	342

CONTENTS.

1

PAGE

From Secretary Bombay Chamber of Commerce to Acting Under-Secretary to Government of Bombay, Revenue Department, dated 19th November, 1883	374
Resolution of Government of Bombay, Revenue Department, dated 20th January, 1884	375

G.—WHEAT CULTIVATION IN THE PUNJAB.

From Officiating Under-Secretary to Government of Punjab, Revenue Department, to Secretary Bombay Chamber of Commerce, dated 5th October, 1883	377
Proceedings of the Punjab Government relating to Wheat Cultivation in the Punjab	377
From Secretary Bombay Chamber of Commerce to Officiating Under-Secretary to Government of Punjab, Revenue Department, dated 20th December, 1883	382

H.—REDUCED RAILWAY RATES AND SUEZ CANAL DUES FOR WHEAT.

From Secretary Bengal Chamber of Commerce to Secretary Bombay Chamber of Commerce, dated 26th June, 1883	383
From Secretary Bombay Chamber of Commerce to Secretary Bengal Chamber of Commerce, dated 13th July, 1883	385
From Secretary Bengal Chamber of Commerce to Secretary Bombay Chamber of Commerce, dated 6th August, 1883	386

I.—PETROLEUM LEGISLATION IN INDIA.

From Bombay Chamber of Commerce to Secretary to Government of Bombay, General Department, dated 7th February, 1883	387
Extract from a Paper "On the Flashing Test for Petroleum" by Professor Abel, C.B., F.R.S. (re-printed from Journal of Society of Chemical Industry, December 1882)	388
From Commissioner of Customs, Salt, Opium and Abkari, Bombay, to Secretary Bombay Chamber of Commerce, dated 3rd July, 1883	395
Copy of Revised Draft Rules under the Petroleum Act VIII. of 1881	395
From Secretary Bombay Chamber of Commerce to Secretary to Government of Bombay, General Department, dated 17th August 1883	406

J.—RAILWAY RATES FOR THE CARRIAGE OF PETROLEUM.

A Memorandum in Reference to Reduced Railway Freights for Petroleum in India, dated 17th January, 1883	408
--	-----

	PAGE
From Secretary Bombay Chamber of Commerce to General Traffic Manager, G. I. P. Railway, dated 3rd February, 1883	... 411
From Secretary Bombay Chamber of Commerce to Agent B. B. & C. I. Railway, dated 8th February, 1883	... 412
From Acting General Traffic Manager, G. I. P. Railway Company, to Secretary Bombay Chamber of Commerce, dated 12th April, 1883	... 412
From Agent B. B. & C. I. Railway to Secretary Bombay Chamber of Commerce, dated 23rd April, 1883	... 413
From Secretary Bombay Chamber of Commerce to General Traffic Manager, G. I. P. Railway Company, dated 16th June, 1883	... 414
From Acting General Traffic Manager, G. I. P. Railway Company, to Secretary Bombay Chamber of Company, dated 12th July, 1883	... 415
From Agent, G. I. P. Railway Company to Secretary Bombay Chamber of Commerce, dated 23th September, 1883	... 415

K.—INCREASED DOCK ACCOMMODATION.

From Secretary Bombay Port Trust to Secretary Bombay Chamber of Commerce, dated 20th July, 1883	... 416
Resolution of Trustees of Bombay Port Trust, dated 12th July, 1883	416
From Secretary Bombay Chamber of Commerce to Secretary Bombay Port Trust, dated 15th August, 1883	... 417
Resolution of Trustees of Bombay Port Trust, dated 23rd August, 1883	... 418
From Secretary Bombay Port Trust to Secretary Bombay Chamber of Commerce, dated 1st September, 1883	... 419
Resolution of Trustees of Bombay Port Trust, dated 30th August, 1883	... 419
Memorandum from Marine Department, Government of Bombay, dated 27th August, 1883	... 421
From Secretary Bombay Port Trust to Secretary Bombay Chamber of Commerce, dated 3rd October, 1883	... 421

L.—DRY DOCK ACCOMMODATION IN THE PORT.

From Secretary to Government of Bombay, Marine Department, to Secretary Bombay Chamber of Commerce, dated 12th September, 1883	... 423
Report of the Committee appointed to consider the Question of Dry Dock Accommodation for Larger Classes of H. M.'s Ships-of-War	... 423
Government Resolution thereon, dated 20th June, 1883	... 425
From Secretary Bombay Chamber of Commerce to Secretary to Government of Bombay, Marine Department, dated 28th September, 1883	... 426

M.—WADWAN STATION COTTON MARKET.

	PAGE
From Assistant Political Agent, Jhalawad Prant, to Secretary Bombay Chamber of Commerce, dated 23rd June, 1883 ...	427
From Secretary Bombay Chamber of Commerce to Assistant Political Agent, Jhalawad Prant, Wadwan, dated 1st February, 1883 ...	427
From Assistant Political Agent, Jhalawad Prant, to Secretary Bombay Chamber of Commerce, dated 6th February, 1883 ...	428

N.—IMPROVEMENT AND CULTIVATION OF COTTON
IN THE DHARWAR COLLECTORATE.

From Commissioner, Southern Division, to Secretary Bombay Chamber of Commerce, dated 17th June, 1883. ...	431
From Secretary Bombay Chamber of Commerce to Commissioner, Southern Division, dated 3rd July, 1883 ...	432
From Secretary Bombay Chamber of Commerce to Secretary to Government of Bombay, Revenue Department, dated 24th July, 1883 ...	433
From Acting Under-Secretary to Government of Bombay, Re- venue Department, to Secretary Bombay Chamber of Commerce, dated 10th August, 1883 ...	434

O.—CULTIVATION OF DIFFERENT KINDS OF COTTON
IN THE KHANDEISH COLLECTORATE.

From Commissioner of Customs, Salt, Opium and Abkari, to Secre- tary Bombay Chamber of Commerce, dated 11th April, 1883 ...	435
Precis of a Correspondence on the Subject of Cultivation of Different Varieties of Cotton in the Northern Division of the Khandeish Collectorate ...	435
From Collector of Khandeish to Commissioner of Central Division, dated 27th March, 1883 ...	441
From Commissioner of Central Division to Commissioner of Customs, Salt, Opium and Abkari, dated 3rd April, 1883...	441
From Secretary Bombay Chamber of Commerce to Commissioner of Customs, Salt, Opium and Akbari, dated 28th July, 1883 ...	442
Memorandum from Bombay Cotton Trade Association ...	442

P.—ALTERATIONS IN THE TONNAGE SCALE.

From Members Bombay Chamber of Commerce to Chairman Bombay Chamber of Commerce, dated 16th June, 1883 ...	444
From Chairman of the Meeting of Merchants interested in Export Trade held on 20th June, to Secretary Bombay Chamber of Commerce, dated 20th June, 1883...	444
From Secretary Bombay Chamber of Commerce to Chairman of the Meeting of Merchants, dated 23rd June, 1883 ...	445
From Secretary Bombay Chamber of Commerce to M. Mowat, Esq., dated 20th June, 1883 ...	445

	PAGE
From M. Mowat, Esq., to Messrs. Hill and Grenan, dated 26th June, 1883...	445
From Secretary Bombay Chamber of Commerce to M. Mowat, Esq., dated 30th June, 1883...	445
From M. Mowat, Esq., to Secretary Bombay Chamber of Commerce, dated, 2nd July, 1883...	446
Results of the Measurements of Articles mentioned in the Tonnage Scale again tested with the view of confirming measurements given in a Report of the Chamber, dated 3rd January, 1879...	446
From Agents Steam Navigation Companies to Chairman Bombay Chamber of Commerce, dated 26th June, 1883...	447
From Masters of Steamers to Chairman Bombay Chamber of Commerce, dated 13th July, 1883...	448
Resolutions passed at a Sepcial General Meeting of Members of the Bombay Chamber of Commerce held on 20th July, 1883...	448
From Secretary Kurrachee Chamber of Commerce to Secretary Bombay Chamber of Commerce, dated 8th September, 1883...	449

Q.—UNIFORM TONNAGE SCALE AT ALL THE INDIAN PORTS.

From Secretary Bengal Chamber of Commerce to Secretary Bombay Chamber of Commerce, dated 6th December, 1882...	450
From Secretary General Shipowners' Society, London, to Secretary Bengal Chamber of Commerce, Calcutta, dated London, 13th October, 1882...	450
From Secretary Bengal Chamber of Commerce, Calcutta, to Secretary General Shipowners' Society, London, dated 30th November, 1882...	450
Circular Letters from Bengal Chamber to all Chambers in India, Ceylon, and Burmah, dated 5th April, 1882...	453
Replies to above Circular...	454
From Chairman of Committee of East India and China Trade Section of Liverpool Incorporated Chamber of Commerce to Secretary Bombay Chamber of Commerce, dated Liverpool, 23rd January, 1883...	461
From Secretary Bombay Chamber of Commerce to Chairman of Committee of East India and China Trade Section of Liverpool Incorporated Chamber of Commerce, dated 23rd February, 1883...	461

R.—THE PORT TRUST, 1883-84.

Memorandum on Budget Estimates for 1883-84...	462
From Hon'ble W. M. Macaulay to Secretary Bombay Chamber of Commerce, dated 17th February, 1883...	465
From Secretary Bombay Chamber of Commerce to Hon'ble W. M. Macaulay, dated 27th February, 1883...	466

	PAGE
Excerpt from Proceedings of a Meeting of Trustees of Port of Bombay, held on 27th February, 1883	466

S.—THE RATE OF INTEREST PAYABLE BY GOVERNMENT ON THE PORT TRUST DEBT.

From Secretary Bombay Port Trust to Secretary Bombay Chamber of Commerce, dated 6th February, 1883	468
From Secretary Bombay Port Trust to Secretary to Government of Bombay, Marine Department, dated 3rd November, 1882... ..	468
Memorandum from Accountant-General, Bombay, dated 9th December, 1882	471
Tabular Statement, from Accountant-General, showing Value and Tonnage of Sea-borne Trade of Port of Bombay from 1871-72 to 1881-82.—Imports and Exports	474
From Secretary Bombay Port Trust to Secretary to Government of Bombay, Marine Department, dated 13th January, 1883	476
Resolution of Government of Bombay, Marine Department, dated 20th January, 1883	478
From Secretary Bombay Port Trust to Secretary Bombay Chamber of Commerce, dated 21st March, 1883	480
Resolution of Government of Bombay, Marine Department, dated 30th March, 1883	480
From Bombay Chamber of Commerce to Secretary to Government of Bombay, Marine Department, dated 9th April, 1883	481
Extract from Chamber's Report on Port Trust Bill, dated 6th January, 1879, addressed to Secretary to Government of Bombay, Marine Department	488
From Secretary to Government of Bombay, Marine Department, to Secretary Bombay Chamber of Commerce, dated 24th April, 1883	489
From Secretary Bombay Chamber of Commerce to Secretary to Government of India, Department of Finance and Commerce, Simla, dated 2nd May, 1883	490
From Secretary Bombay Chamber of Commerce to Secretary Bombay Port Trust, dated 4th May, 1883	491
From Secretary Bombay Chamber of Commerce to Secretary to Government of Bombay, Marine Department, dated 4th May, 1883	491
From Secretary to Government of India, Department of Finance and Commerce, to Secretary Bombay Chamber of Commerce, dated 12th June, 1883	491

T.—WORKING OF THE COAL TRADE ON THE BUNDERS.

From Secretary Bombay Port Trust to Secretary Bombay Chamber of Commerce, dated 12th May, 1883	493
---	-----

	PAGE
From Secretary Bombay Chamber of Commerce to Secretary Bombay Port Trust, dated 22nd August, 1883...	495
From Secretary Bombay Port Trust to Secretary Bombay Chamber of Commerce, dated 21st December, 1883...	496
From Messrs. C. J. Khambatta & Co. to Traffic Manager, Bombay Port Trust, Carnac Bunder, dated 18th October, 1883	496
From Messrs. Vullibhoy Khanbhoy & Co. to Traffic Manager, Bombay Port Trust, dated 20th October, 1883	497
From Secretary Bombay Chamber of Commerce to Secretary Bombay Port Trust, dated 26th January, 1884.	498

U.—QUARANTINE IN EGYPT.

From Acting Under-Secretary to Government of Bombay, General Department, to Secretary Bombay Chamber of Commerce, dated 15th May, 1883	500
From Secretary Bombay Chamber of Commerce to Acting Under-Secretary to Government of Bombay, General Department, dated 18th May, 1883	500
From Acting Under-Secretary to Government of Bombay, General Department, to Secretary Bombay Chamber of Commerce, dated 24th May, 1883	504
From Secretary Bombay Chamber of Commerce to Secretary London Chamber of Commerce, dated 25th May, 1883	505
From Secretary London Chamber of Commerce, to Secretary Bombay Chamber of Commerce, dated London, 13th June, 1883.	505
From do. do. to do. do., dated 20th June, 1883	506
From Acting Under-Secretary to Government of Bombay, General Department, to Secretary Bombay Chamber of Commerce, dated 27th June, 1883	506
Copy of a Despatch addressed by Government of India to Her Majesty's Secretary of State for India, dated 15th June, 1883	506

V.—THE CUSTOMS TARIFF OF MOZAMBIQUE.

From Acting Under-Secretary to Government of Bombay, Revenue Department, to Secretary Bombay Chamber of Commerce, dated 2nd March, 1883	508
From Assistant Secretary to Government of India, Department of Finance and Commerce, to Secretary to Government of Bombay, Revenue Department, dated 16th February, 1883...	508
From Her Majesty's Acting Agent and Consul-General, Zanzibar, to Secretary to Government of India, Foreign Department, dated 17th December, 1882	509
Tabular Statement showing Exports and Imports from and into British India into and from Mozambique during each of the Official Years 1878-79 to 1881-82	510

	PAGE
From Secretary Bombay Chamber of Commerce to Committee of Bombay Millowners' Association, dated 15th March, 1883	511
Tabular Statement showing Number of Packages and Yards of Bombay Manufactured Piece-Goods exported to Mozambique and Adjoining Territory under the Portuguese Government .	512
Memorial of Bombay Millowners' Association, addressed to His Excellency the Viceroy and Governor-General of India, dated 28th April, 1883	513
From Secretary Bombay Chamber of Commerce to Under-Secretary to Government of Bombay, Revenue Department, dated 28th April, 1883	515
From Acting Under-Secretary to Government of Bombay, Revenue Department, to Secretary Bombay Chamber of Commerce, dated 13th June, 1883	516
From Assistant Secretary to Government of India, Department of Finance and Commerce, to Secretary to Government of Bombay, Revenue Department, dated 31st May, 1883	516
Copy of a Despatch addressed by Government of India to Her Majesty's Secretary of State for India, dated 20th February, 1883	516
From Her Majesty's Secretary of State for India to His Excellency the Governor-General of India in Council, dated 26th April, 1883	517

W.—TASAR SERI-CULTURE IN THE BOMBAY PRESIDENCY.

From Superintendent Government Photozincographic Office to Secretary to Government of Bombay, General Department, dated 14th February, 1883	518
---	-----

X.—CRIMINAL PROCEDURE CODE, 1882, AMENDMENT BILL.

Telegram from Secretary Bengal Chamber of Commerce to Secretary Bombay Chamber of Commerce, dated 22nd February, 1883	524
Statement of Objects and Reasons, dated 30th January, 1883	524
A Bill to amend the Code of Criminal Procedure, 1882, so far as it relates to the Exercise of Jurisdiction over European British Subjects	525
From Secretary Bombay Chamber of Commerce to Secretary to Government of Bombay, Legislative Department, dated 9th March, 1883	526
Telegram from Chairman Bombay Chamber of Commerce to Secretary to Government of India, Legislative Department, dated 8th March, 1883	527

	PAGE
From Acting Under-Secretary to Government of Bombay, Judicial Department, to Secretary Bombay Chamber of Commerce, dated 12th March, 1883	527
Memorial of the Bombay Chamber of Commerce to H. E. the Viceroy and Governor-General of India, dated 22nd March, 1883...	527
From Secretary Bombay Chamber of Commerce to Secretary to Government of Bombay, Legislative Department, dated 31st March, 1883	530
From Under-Secretary to Government of Bombay, Judicial Department, to Secretary Bombay Chamber of Commerce, dated 5th April, 1883	531
From Under-Secretary to Government of Bombay, Judicial Department, to Chairman Bombay Chamber of Commerce, dated 2nd April, 1883	531
From Secretary to Government of India, Legislative Department, to Chief Secretary to Government of Bombay, dated 17th March, 1883	531
From Secretary Bombay Chamber of Commerce to Under-Secretary to Government of Bombay, Judicial Department, dated 12th April, 1883... ..	532

Y.—SAMPLES OF MAHABLESHWAR ARROWROOT.

From Acting Under-Secretary to Government of Bombay, General Department, to Secretary Bombay Chamber of Commerce, dated 4th January, 1883	533
From Commissioner of Central Division to Secretary to Government of Bombay, dated 14th December, 1882	533
From Superintendent, Mahableshwar, to Collector of Satara, dated 7th February, 1882	534
From Commissioner of Central Division to Collector of Satara, dated 28th February, 1882... ..	534
From Superintendent, Mahableshwar, to Collector of Satara, dated 22nd November, 1882	534

Z.—THE INDIAN EXPLOSIVES BILL, 1883.

From Acting Under-Secretary to Government of Bombay to Secretary Bombay Chamber of Commerce, dated 24th January, 1883 ...	536
Statement of Objects and Reasons, dated 1st January, 1883.	536
From Bombay Chamber of Commerce to Secretary to Government of Bombay, Revenue Department, dated 19th February, 1883 ...	541

AA.—THE INDIAN STEAM SHIPS BILL, 1883.

From Secretary to Government of Bombay, Marine Department, to Secretary Bombay Chamber of Commerce, dated 6th April, 1883	546
--	-----

	PAGE
Statement of Objects and Reasons, dated 5th March 1883 ...	546
From Bombay Chamber of Commerce to Secretary to Government of Bombay, Marine Department, dated 1st June, 1883 ...	549

BB.—THE INLAND STEAM VESSELS BILL, 1883.

From Secretary to Government of Bombay, Marine Department, to Secretary Bombay Chamber of Commerce, dated 6th April, 1883	554
Statement of Objects and Reasons, dated 5th March, 1883...	554
From Bombay Chamber of Commerce to Secretary to Government of Bombay, Marine Department, dated 1st June, 1883 ...	556
Copy of Report made by Examiners for Passing Marine Engineers and Engine Drivers for the Port of Bombay to Port Officer of Bombay	559

CC.—POSTAL ARRANGEMENTS BETWEEN BOMBAY AND KARACHI.

From Chairman Karachi Chamber of Commerce, to Chairman Bombay Chamber of Commerce, dated 20th March, 1883 ...	562
From Chairman Karachi Chamber of Commerce to His Excellency the Viceroy and Governor-General in India, dated 9th March, 1883.	563
Copy of a Resolution passed at Special General Meeting of Karachi Chamber of Commerce, held on 23rd February, 1883 ...	568
Extract from Proceedings of Meeting of Managing Committee of Karachi Municipality, held on 24th February, 1883 ...	569
From Secretary Bombay Chamber of Commerce to Secretary to Government of Bombay, Revenue Department, dated 25th April, 1883	570
From Acting Under-Secretary to Government of Bombay to Secre- tary Bombay Chamber of Commerce, dated 13th September, 1883.	571
From Under-Secretary to Government of India, Department of Finance and Commerce, to Secretary to Government of Bombay, dated 17th August, 1883	572
From Secretary Bombay Chamber of Commerce to Chairman Karachi Chamber of Commerce, dated 28th September, 1883 ...	573

DD.—PROPOSED LINE OF RAILWAY FROM GODRA TO RUTLAM.

From Agent B. B. & C. I. Railway Company to Consulting Engineer for Railways, and Joint-Secretary to Government of Bombay, Public Works Department, dated 6th January, 1883 ...	574
Resolution of Government of Bombay, Public Works Department (Railway), dated 19th January, 1883	577

	PAGE
From Bombay Chamber of Commerce to Consulting Engineer for Railways, and Joint-Secretary to Government of Bombay, Public Works Department, dated 19th February, 1883 ...	577
From Under-Secretary to Government of Bombay, Public Works Department (Railway), to Secretary Bombay Chamber of Commerce, dated 24th February, 1883... ..	579
Resolution of Government of Bombay, Public Works Department (Railway), dated 23rd February, 1883	580
From Under-Secretary to Government of Bombay, Public Works Department (Railway), to Secretary Bombay Chamber of Commerce, dated 15th March, 1883	580
From Deputy Secretary to Government of India, Public Works Department (Railway Construction), to Secretary to Government of Bombay, Public Works Department, dated 8th March, 1883 ...	580

EE.—EXTENSION OF THE BHOPAL STATE RAILWAY THROUGH LALITPUR AND JHANSI TO GWALIOR WITH A BRANCH FROM JHANSI TO CAWNPORE.

From Thomas R. Watt, Esq., G. I. P. Railway Company, to Under-Secretary of State for India, dated London, 10th October, 1881 ...	582
From Sir Louis Mallet to Thomas R. Watt, Esq., G. I. P. Railway Company, dated London, 27th October, 1881	583
From Thomas R. Watt, Esq., G. I. P. Railway Company, to Under-Secretary of State for India, dated London, 21st November, 1881...	583
From Sir Louis Mallett to Thomas R. Watt, Esq., G. I. P. Railway Company, dated India Office, 12th January, 1882... ..	586
From Thomas R. Watt, Esq., G. I. P. Railway Company, to Under-Secretary of State for India, dated London, 5th May, 1882 ...	586
From Juland Danvers, Esq., to Thomas R. Watt, Esq., dated India Office, London, 22nd May, 1882	587
From Sir Louis Mallet to Thomas R. Watt, Esq., G. I. P. Railway Company, dated India Office, 5th July, 1882	588
From Thomas R. Watt, Esq., G. I. P. Railway Company, to Under-Secretary of State for India, dated London, 10th July, 1882 ...	588
From Thomas R. Watt, Esq., G. I. P. Railway Company, to Under-Secretary of State for India, India Office, dated 18th December, 1882	589
From J. K. Cross, Esq., to Thomas R. Watt, Esq., dated 15th February, 1883	590
From Thomas R. Watt, Esq., to Under-Secretary of State for India, dated London, 19th March, 1883	591
From do. do. to do. do., dated London, 25th April, 1883 ...	591
From Sir Louis Mallet to Thomas R. Watt, Esq., dated 9th May, 1883	592

From Thomas R. Watt, Esq., to Under-Secretary of State for India, dated London, 18th May, 1883	593
From Thomas R. Watt, Esq., to Under-Secretary of State for India, dated London, 15th June, 1883	594
From Sir Louis Mallet to Thomas R. Watt, Esq., dated India Office, S. W., 31st August 1883	594
From Thomas R. Watt, Esq., G. I. P. Railway Company, to Under- Secretary of State for India, dated London, 10th December, 1883	594
From Horace Walpole, Esq., to Thomas R. Watt, Esq., dated Lon- don, 21st December, 1883	595
Memorial of Bombay Chamber of Commerce to Her Majesty's Principal Secretary of State for India, dated 21st November, 1883	595
From Secretary Bombay Chamber of Commerce to Secretary to Government of Bombay, Public Works Department (Railway), dated 21st November, 1883	598
From Secretary Bombay Chamber of Commerce to Secretary Lon- don Chamber of Commerce, dated 23rd November, 1883	598
From Joint-Secretary to Government of Bombay, Public Works Department (Railway), to Secretary Bombay Chamber of Com- merce, dated 3rd December, 1883	599
From Secretary Liverpool Incorporated Chamber of Commerce to Secretary Bombay Chamber of Commerce, dated 13th December, 1883	599
From Secretary London Chamber of Commerce to Secretary Bom- bay Chamber of Commerce, dated 14th December, 1883	599
From Secretary Manchester Chamber of Commerce to Secretary Bombay Chamber of Commerce, dated 9th January, 1884	600
From Under-Secretary to Government of Bombay, Public Works Department (Railway), to Secretary Bombay Chamber of Com- merce, dated 6th March, 1884	600
From Her Majesty's Principal Secretary of State for India to H. E. the Right Hon'ble the Governor in Council, Bombay, dated 7th February, 1884	601

FF.—THE NAGPUR, BENGAL RAILWAY.

From Bengal Chamber of Commerce to Government of India, dated 29th November, 1881	03
From Government of Bengal to Government of India, dated 13th January, 1882	605
From Bengal Chamber of Commerce to Government of India, dated 9th March, 1882	606
From Secretary Bengal Chamber of Commerce to Secretary to Government of India, Public Works Department, dated 2nd May, 1883	608

From Government of India to Bengal Chamber of Commerce, dated 17th August, 1883	699
From Officiating Secretary Bengal Chamber of Commerce to Secretary to Government of India, Public Works Department, Simla, dated 26th September, 1883	612
From F. Prestage, Esq., to Secretary Bengal Chamber of Commerce, dated London, 1st October, 1883	614
From Bombay Chamber of Commerce to Secretary to Government of Bombay, Public Works Department (Railways), dated 4th December, 1883	620
Memorial of Bombay Chamber of Commerce to the Viceroy and Governor-General of India in Council, dated 15th May, 1878	622
From Joint-Secretary to Government of Bombay, Public Works Department (Railway), to Secretary Bombay Chamber of Commerce, dated 20th December, 1883	624
From Under-Secretary to Government of Bombay, Public Works Department (Railway), to Secretary Bombay Chamber of Commerce, dated 6th March, 1884	624
From Her Majesty's Principal Secretary of State for India to H. E. the Right Hon'ble the Governor in Council, Bombay, dated India Office, 7th February, 1884	624

GG.—THE JHANSI-MANICKPORE RAILWAY.

From Bombay Chamber of Commerce to Secretary to Government of Bombay, Public Works Department (Railways), dated 8th December, 1883	626
From Joint-Secretary to Government of Bombay, Public Works Department (Railway), to Secretary Bombay Chamber of Commerce, dated 2nd January, 1884	628
From Under-Secretary to Government of Bombay, Public Works Department (Railway), to Secretary Bombay Chamber of Commerce, dated 6th March, 1884	628
From Her Majesty's Principal Secretary of State for India to H. E. the Right Hon'ble the Governor in Council, Bombay, dated 7th February, 1884	628

HH.—TRADE AND COMMERCE OF MACEDONIA.

From Acting Under-Secretary to Government of Bombay, Revenue Department, to Secretary Bombay Chamber of Commerce, dated 8th June, 1883	630
From Officiating Under-Secretary to Government of India, Department of Finance and Commerce, to Secretary to Government of Bombay, dated 21st May, 1883	630
Extract from Report on Trade and Commerce of Macedonia by Her Majesty's Consul-General at Salonica regarding Production of Opium for 1880-81	630

II.—INTRODUCTION OF EGYPTIAN COTTON INTO INDIA.

	PAGE
From Commissioner of Southern Division to Secretary Bombay Chamber of Commerce, dated 20th June, 1883	635
From Secretary Bombay Chamber of Commerce to Commissioner of Southern Division, dated 3rd July, 1883	635

JJ.—EXPORT TRADE IN MOWRA FLOWERS.

From Commissioner of Customs, Salt, Opium and Abkari, Bombay, to Secretary Bombay Chamber of Commerce, dated 3rd July, 1883.	637
From Secretary Bombay Chamber of Commerce to Commissioner of Customs, Salt, Opium and Abkari, dated 18th July, 1883 ...	637
From Commissioner of Customs, Salt, Opium and Abkari, Bombay, to Secretary Bombay Chamber of Commerce, dated 19th July, 1883	638

KK.—GOVERNMENT OF INDIA'S PROPOSAL TO INTRODUCE A UNIFIED STAMP OF THE VALUE OF ONE ANNA FOR POSTAGE AND REVENUE PURPOSES.

From Acting Under-Secretary to Government of Bombay, Revenue Department, to Secretary Bombay Chamber of Commerce, dated 8th August, 1883	639
From Under-Secretary to Government of India, Department of Finance and Commerce, to Secretary to Government of Bombay, dated 26th July, 1883	639
From Secretary Bombay Chamber of Commerce to Under-Secretary to Government of Bombay, Revenue Department, dated 1st September, 1883	645

LL.—SAILING SHIP BILL OF LADING HOMEWARDS.

From Secretaries Liverpool Shipowners' Association to M. Mowat, Esq., Bombay, dated, 25th June, 1883	647
Endorsement, dated London, 11th April, 1881	647
Form of Bill of Lading—Calcutta to United Kingdom	649
From Secretary Bombay Chamber of Commerce to Secretary Bengal Chamber of Commerce, dated 7th August, 1883	650
From Officiating Secretary Bengal Chamber of Commerce to Secretary Bombay Chamber of Commerce, dated 22nd August, 1883 ...	650
From Secretary Bombay Chamber of Commerce to Secretaries Liverpool Shipowners' Association, dated 7th December, 1883 ..	650
From Secretaries Liverpool Shipowners' Association to Secretary Bombay Chamber of Commerce, dated 9th January, 1884 ...	651

MM.—STOCK NOTES.

	PAGE:
From Acting Under-Secretary to Government of Bombay, Financial Department, to Secretary Bombay Chamber of Commerce, dated 11th September, 1883	652
Resolution of Government of India, Department of Finance and Commerce..	652
Appendix A prescribing Rules for regulating the Payment of Stock Notes, dated 10th August, 1883	656
From Secretary Bombay Chamber of Commerce to Under-Secretary to Government of Bombay, Financial Department, dated 8th December, 1883.	657

NN.—PROFESSIONAL COSTS OF SUCCESSFUL PARTIES
IN THE SMALL CAUSES COURT IN SUITS UNDER
PRESENT EXISTING JURISDICTION.

From Secretary Bombay Chamber of Commerce to Registrar of Bombay Court of Small Causes, dated 12th December, 1883	661
From Clerk of Bombay Court of Small Causes to Secretary Bombay Chamber of Commerce, dated 10th January, 1884..	662

OO.—APPLICATION OF THE FAMINE INSURANCE
FUND AS A FUND WITH WHICH TO RAISE LOANS
FOR THE CONSTRUCTION OF RAILWAYS.

From Chairman Madras Chamber of Commerce to Chairman Bombay Chamber of Commerce, dated 15th August, 1883	664
From Secretary Bombay Chamber of Commerce to Chairman Madras Chamber of Commerce, dated 1st September, 1883.	664
From Chairman Madras Chamber of Commerce to Chairman Bombay Chamber of Commerce, dated 19th October, 1883	665
From Secretary Bombay Chamber of Commerce to Chairman Madras Chamber of Commerce, dated 15th November, 1883	666
From Secretary Madras Chamber of Commerce to Secretary Bombay Chamber of Commerce, dated 20th November, 1883	666
From Chairman Madras Chamber of Commerce to Secretary to Government of India, Public Works Department, Simla, dated 19th October, 1883...	666
From Bombay Chamber of Commerce to Secretary to Government of India, Public Works Department, Calcutta, dated 5th December, 1883	667
From Secretary Bombay Chamber of Commerce to Secretary Manchester Chamber of Commerce, dated 7th December, 1883	668
Similar Letter to Chambers of Commerce of London and Liverpool.	668
From Officiating Under-Secretary to Government of India, Public Works Department (Railway Construction), to Secretary Bombay Chamber of Commerce, dated 31st January, 1884...	669

PP.—QUOTATIONS OF EXCHANGE, DISCOUNT, GOVERNMENT SECURITIES, AND FREIGHT, AND OF THE PRICES OF THE PRINCIPAL ARTICLES OF IMPORT AND EXPORT, DURING THE YEAR 1883...	670
QQ.—STATEMENT OF ANNUAL VALUE OF EXPORT AND IMPORT TRADE OF INDIA, AND TOTAL MILES OF RAILWAY OPENED IN 1852-53 TO 1882-83 ...	688
RR.—FOREIGN TRADE OF BRITISH INDIA.	
Summary of Imports and Exports in 1877-78 to 1882-83 ...	690
SS.—FOREIGN TRADE OF THE BOMBAY PRESIDENCY.	
Imports of Principal Articles, including Treasure, imported in 1878-79 to 1882-1883...	692
Exports of do. do. exported in 1878-79 to 1882-83..	694
WORKING DAYS UNDER A CHARTER PARTY ...	696



Bombay Chamber of Commerce.

ESTABLISHED 22nd SEPTEMBER 1836.

Honorary*Members.

WILLIAM RATHBONE, Esq., M.P.
A. H. CAMPBELL, Esq.

J. M. MACLEAN, Esq.
Major L. CONWAY-GORDON.

Members.

Messrs. ALDRIDGE, SALMON & Co.
" BATES (EDWARD) & Co.
" BELL, BRANDENBURG & Co.
" BENN, ASHLEY & Co.
" BLASCHECK (A.) & Co.
" EWART, LATHAM & Co.
" FINLAY, MUIR & Co.
" FORBES (C. H. B.) & Co.
" FORBES (SIR CHARLES) & Co.
" FRAMJEE, SANDS & Co.
" GADDUM, BYTHELL & Co.
" GLADE & Co.
" GRAHAM (W. & A.) & Co.
" GREAVES, COTTON & Co.
" KILLICK, NIXON & Co.
" LANG, MOIR & Co.
" LATHAM, ABERCROMBIE & Co.
" LOCKHART (GEORGE) & Co.
" LOUIS DREYFUS & Co.
" LYON & Co.
" MACDONALD (C.) & Co.
" MACKINNON, MACKENZIE & Co.
" NARANDASS RAJARAM & Co.
" OWEN & OKELL.
" PEEL, CASSELS & Co.
" PELLY & Co.
" PUNNETT & Co.
" RALLI BROTHERS.
" RICHARDSON AND CRUDDAS.

Messrs. RITCHIE, STEUART & Co.
" SASSOON (DAVID) & Co.
" SASSOON (E. D.) & Co.
" SPINNER (E.) & Co.
" VOLKART BROTHERS.
" WALLACE & Co.
" NANABHOY BYRAMJEE JEE-
JEEBHOY & Co.
AHMEDABHOY HUBIBHOY, Esq.
TARIA TOPUN, Esq.
DINSHAW MANOCKJEE PETIT, Esq.
THE AUSTRO-HUNGARIAN LLOYD'S S.N.
COMPANY.
THE AGRA BANK, LIMITED.
THE BANK OF BOMBAY.
THE B. B. & C. I. RAILWAY COM-
PANY.
THE CHARTERED BANK OF INDIA.
AUSTRALIA, AND CHINA.
THE CHARTERED MERCANTILE BANK
OF INDIA, LONDON AND CHINA.
THE COMPTOIR D'ESCOMPTE DE PARIS.
THE G. I. P. RAILWAY COMPANY.
THE HONGKONG AND SHANGHAI BANK-
ING CORPORATION.
THE NATIONAL BANK OF INDIA.
THE ORIENTAL BANK CORPORATION.
THE P. & O. S. N. COMPANY.
THE RUBATTINO S. N. COMPANY.

RETIRING COMMITTEE.

Mr. JAMES THORBURN, *Chairman*.

Mr. L. R. W. FORREST,* *Deputy Chairman*.

Mr. T. W. WOOD.....	} <i>Members.</i>
" M. R. WYER†.....	
" J. L. SYMONS*.....	
" J. STEINER.....	
" E. J. REID.....	

COMMITTEE FOR 1884.

Mr. F. FORBES ADAM, *Chairman*.

Mr. M. R. WYER, *Deputy Chairman*.

Mr. J. H. SLIGHT.....	} <i>Members.</i>
" J. L. SYMONS.....	
" G. A. BARNETT.....	
" A. PALLIS.....	
" A. F. BEAUFORT.....	

Mr. JOHN GORDON, *Secretary*.

* Mr. F. Forbes Adam, who was elected Deputy Chairman for the year, having resigned office on his leaving for England in July, Mr. L. R. W. Forrest was elected in his place; and Mr. J. L. Symons was appointed to fill up the vacancy on the Committee.

† Mr. M. R. Wyer was elected a member of the Committee in place of Mr. J. L. Mackay, who also left for England in June.

HOLIDAYS UNDER CHARTER-PARTIES

FOR THE YEAR 1884.

In accordance with the Resolution passed at a General Meeting of the Chamber of Commerce held on the 22nd July, 1881, the Committee of the Chamber beg to inform the Public that the following days have been fixed by them to be Holidays under Charter-Parties for the year 1884 :—

New Year's Day ...	1st January 1884	Tuesday.....	1 Day.
Holi	11th and 12th March .	Tuesday & Wednesday	2 Days
Easter	11th and 12th April.	Friday & Saturday	2 ,,
Queen's Birthday ..	24th May.....	Saturday	1 Day.
Cocoonut Day	6th August	Wednesday.....	1 ,,
Janma Ashtami ...	13th August	Wednesday	1 ,,
Pateti	18th September	Thursday.....	1 ,,
Dussera	29th September.....	Monday	1 ,,
Dewali	17th & 18th October..	Friday & Saturday	2 Days
Mohurram	29th & 30th October...	Wednesday & Thursday	2 ,,
Christmas	25th & 26th Dec.	Thursday & Friday	2 ,,

By order of the Committee,

J. GORDON,
Secretary.

Bombay Chamber of Commerce, 10th December, 1883.

PUBLIC HOLIDAYS

*Sanctioned by Government for the year 1884, under Section 25
of Act XXVI. of 1881, entitled the "Negotiable
Instruments Act, 1881."*

For Holi.....	Tuesday and Wednesday, the 11th and 12th March.
For Ramnavami.....	Saturday, the 5th April.
For Easter.....	Saturday, the 12th April.
For Queen's Birthday	Saturday, the 24th May.
For Cocanaut Day.....	Wednesday, the 6th August.
For Gokal Ashtami	Wednesday, the 13th August.
For Ganesh Chaturthi	Saturday, the 23rd August.
For Parsi New Year's Day ...	Wednesday and Thursday, the 17th and 18th September.
For Dassara	Monday, the 20th September.
For Divali	Saturday and Monday, the 18th and 20th October.
For Moharrum	Thursday, the 30th October.
For Christmas	Wednesday and Friday, the 24th and 26th December.
For the New Year	Wednesday, the 31st December.

RULES AND REGULATIONS

OF THE.

Bombay Chamber of Commerce.

*Revised and adopted down to the General Meeting of the Chamber
held on the 5th December, 1883.*

I. THE object and duties of the Chamber shall be to encourage a friendly feeling and unanimity among commercial men on all subjects involving their common good ; to promote and protect the general mercantile interests of this Presidency ; to collect and classify information on all matters of general commercial interest ; to obtain the removal, as far as such a Society can, of all acknowledged grievances affecting merchants as a body, or mercantile interests in general ; to receive and decide references on matters of usage and custom in dispute, recording such decisions for future guidance, and by this and other means assisting to form a code of practice for simplifying and facilitating business ; to communicate with the public authorities, with similar Associations in other places, and with individuals on all subjects of general mercantile interest ; and to arbitrate between parties willing to refer to, and abide by, the judgment of the Chamber.

II. All persons engaged or interested in mercantile pursuits desirous of joining the Chamber, and disposed to aid in carrying into effect the objects of the same, shall be admitted Members by the vote of a majority of not less than two-thirds of those voting at a General Meeting, as provided for in Rule III.

III. One-fourth of the firms constituting the Chamber shall be held sufficient to form any General Meeting when the same has been regularly called together—one partner representing a firm ; but two or more partners of one firm being present only to count as one Member of the Chamber. That seven clear days' notice shall be given before any resolution proposing changes in the Rules of the Chamber be brought forward, and that such notice be given in writing to the Secretary, who shall circulate it for the information of the Members of the Chamber.

IV. The Chamber reserves to itself the right of expulsion in case of need, to be decided at a General Meeting by a majority of three-fourths of the Members present at such General Meeting duly convened.

V. The subscription of each firm or Member of the Chamber shall be Rs. 15 per month, and the charge for a copy of each of the publications to Members be Rs. 15 per mensem.

VI. The affairs and funds of the Association shall be managed by a Committee of seven Members, consisting of the Chairman and Deputy Chairman of the Chamber and five Members. The Chairman or Deputy Chairman, as the case may be, shall be *ex-officio* Chairman of the Committee, and in their absence the Committee shall elect their own Chairman. Three to be a quorum.

VII. The following shall be the rules with respect to the election of the Committee :—

1. The Committee shall consist of seven Members, one of whom shall hold the office of Chairman, and another that of Deputy Chairman, of whom the two latter officers shall be elected by ballot.
2. A separate ballot for the election of Chairman and Deputy Chairman shall take place annually on different days, between the 1st and 20th of December in each year, as may be fixed by the then sitting Committee: the election of Chairman shall take place first. The new Committee shall take office on the 1st of January in each year, and continue to act until the 31st December following. Should any delay take place in the election of the new Committee, the retiring Committee shall hold office until the new Committee is formed.
3. In order that the various interests connected with the Chamber may be fully represented on the Committee, there shall be at least four Mercantile Members, and it is desirable that the remainder should severally represent the Banking, Railway, and Shipping interests.
4. Two members of one Firm shall not be on the Committee at the same time.
5. No Member of the Chamber shall give more than one vote for a candidate.
6. The Secretary of the Chamber shall circulate among the Members the names of all the gentlemen who are eligible for election, seven clear days before the election takes place.
7. The retiring Committee shall appoint two days, for the election of Chairman, and two days for the election of Deputy Chairman, which shall be duly advertised, upon which the balloting shall take place. The ballot-box shall be open from 10 A.M. till 6 P.M. on each day.
8. The voting shall be by papers signed by the Members and deposited in the ballot-box on the days appointed by the Committee.
9. The retiring Committee shall appoint two Scrutineers, who, at 6 P.M. on the second day of each ballot, shall open the box and declare the result.
10. Those who have the largest number of votes for the offices of Chairman and Deputy Chairman, shall be considered duly elected. In the event of the gentleman at the head of the list for the Chairmanship or Deputy Chairmanship refusing to act, or of both refusing to act, there shall be a fresh election for either or both offices.
11. In the event of an equality of votes preventing the due

election of either office-bearer, the Members of the Chamber shall vote afresh in the manner above laid down.

12. The remaining Members of the Committee shall be nominated by the retiring Committee, in conjunction with the newly elected Chairman and Deputy Chairman ; such nomination to be submitted to the Chamber at a General Meeting for confirmation.
13. In the event of a vacancy in the Committee, the remaining Members shall have the power of filling it up, unless it be a vacancy in the Chairmanship, which shall in all cases be the subject of a special ballot. A vacancy shall be considered *ipso facto* to occur if a Member remain absent from Bombay for more than two months.
14. Those eligible for seats on the Committee are partners in firms who are Members, or managers holding powers of attorney ; the officers in charge of Banking and Shipping establishments ; the representatives of Railway and Joint Stock Companies ; and those who are Members in their own right.

VIII. All questions before the Committee shall be decided by a majority, the Chairman having a second or casting vote in case of an equality of voters.

IX. The Committee shall meet on Friday, or on such other day as may be found by them most convenient, of every week, to receive and dispose of all communications and references, and to take under their consideration generally all matters embraced in the objects of the Chamber ; and their proceedings shall be laid on the table for the inspection of all Members, subject to such regulations as they may make.

X. General Meetings of the Chamber shall be held quarterly, and at such other times as may be decided upon by the Committee, for the purpose of discussing any measures of public interest which may arise, and the Committee of the Chamber shall be entrusted with the selection of subjects for discussion at such Meetings, and they shall give notice of the same to the Members at least three days before the Meeting. The Annual General Meeting shall be held in the month of December, on such day as the Committee for the time being shall direct, and seven days' notice shall be given of such Meeting. A Special General Meeting shall be called by the Chairman, or by his order, or, if there be no Chairman, by the Secretary, within seven days after the receipt of a requisition from any three Members of the Chamber, but a majority of Members qualified to vote at a Meeting shall be required to constitute such General Meeting. All General Meetings of the Chamber shall be advertised in the newspapers.

XI. The Committee are authorised to provide suitable accommodation for the meeting of the Chamber, to pay all expenses of the establishment, and to control generally the management of the affairs of the Chamber.

XII. All moneys or funds of the Chamber, as received, shall be paid into the hands of the Treasurer or Treasurers for the time being, and the same shall be available by cheques signed by the Chairman, or in his absence by the Acting Chairman for the time being, and by

one other Member of the Committee ; and an Auditor shall be appointed by the Members annually to audit the accounts of the Chamber.

XIII. A Secretary shall be appointed by a majority of Members in such way as the Committee for the time being may point out ; and it shall be the duty of such Secretary to keep the records and accounts of the Chamber, to collect subscriptions, handing the same over to the Treasurer, to conduct correspondence, and to act generally under the directions of the Committee.

XIV. All the proceedings of the Committee shall be subject to approval or otherwise of General Meetings duly convened.

XV. Any stranger engaged or interested in mercantile pursuits visiting the Presidency may be introduced as a visitor by any Member of the Chamber inserting his name in a book to be kept for the purpose, but a residence of two months shall subject him to the rule for the admission of Members.

XVI. *Honorary Members.*—Gentlemen distinguished for public services, or eminent in commerce and manufactures, may be elected Honorary Members of the Chamber, and as such shall be exempted from paying subscriptions.

XVII. An Annual Report of the proceedings shall be made, and copies sent to the similar Associations in India, China, and elsewhere.

XVIII. The foregoing Rules shall be added to, or altered, only by a majority of Members of the Chamber.

XIX. The foregoing Rules shall be copied into a book, to be kept with the records of the Chamber, and shall be printed, and a copy delivered to each Member.

RULES FOR THE ELECTION OF PORT TRUSTEES.

Rules of the Chamber as to the manner in which the Elective Trustees of the Port shall be elected.

1. The names of those who wish to become candidates to be sent in to the Secretary of the Chamber seven clear days before the election takes place.

2. The Committee of the Chamber shall circulate the names of the applicants three clear days before the election.

3. The Committee shall appoint two days, which shall be duly advertised, upon which the balloting shall take place. The ballot-box shall be open from 10 a.m. till 6 p.m. on each day.

4. Votes may be given either in person or through any one duly authorized by a member of the Chamber.

5. The Committee shall appoint two scrutineers who, at 6 p.m. on the second day of the ballot, shall open the Box, and declare the result.

6. The candidates who have the largest number of votes shall be declared duly elected.

7. In the event of an equality of votes preventing the due election of any of the Trustees, the members of the Chamber shall vote afresh in the manner above laid down.

8. In the event of a casual vacancy or the temporary absence of a Trustee, the above course shall be followed in the appointment of a substitute

" COMMITTEES OF ARBITRATION.

Seeing it to be desirable that questions affecting the prevailing customs of trade in Bombay should be settled in such a way that the decisions arrived at may be properly recorded, and stand thereafter as precedents to regulate the settlement of similar disputes, it was decided by the Chamber, at a General Meeting held on 3rd August, 1880, to try and institute such a system as it might be hoped would attain this object. References to the Chamber shall be open to all persons ; and if any question affecting, or subject to, the custom of the trade of Bombay be submitted, with the mutual consent of those interested, to the Committee of the Chamber, the latter will take it into consideration, and, if they consider it desirable, will appoint a Special Sub-Committee of Arbitration for its settlement under the following Regulations :—

- 1.—A Sub-Committee shall consist of three members, of whom at least one should belong to the General Committee of the Chamber.
- 2.—A record book shall be kept in which all details shall be entered both as to the questions in dispute, the decisions of the Committee, &c., &c. This book shall be open to all members of the Chamber.
- 3.—The Sub-Committee may refer to the General Committee for instructions on any point of difficulty.
- 4.—With the concurrence of those interested, the Sub-Committee may take counsel's opinion, or the evidence of experts, at the expense of the disputants.
- 5.—The Sub-Committee may decline to express an opinion on the plea that points of law are involved in the case.
- 6.—A unanimous opinion expressed by the Sub-Committee shall be at once communicated to the parties interested by the General Committee.
- 7.—Any member of the Sub-Committee dissenting from the conclusion arrived at by the other two may communicate his reasons for dissenting when the Report is handed in to the General Committee.
- 8.—An opinion given by the Sub-Committee from which dissent is expressed by any of the members shall be reconsidered by the General Committee.
- 9.—If, out of the General Committee, not less than three members consider that the expression of dissent is justified, the Sub-Committee may be asked to reconsider the case.
- 10.—If, on reconsideration, the opinion of the Sub-Committee remains unchanged, the decision shall be communicated to the parties interested by the General Committee.
- 11.—It shall be open to the General Committee to record, in such way as they may consider best, any cases which may be useful as precedents in establishing the custom of the Port.
- 12.—A fee of Rupees Thirty shall be payable to the Secretary of the Chamber by each of the parties to the Arbitration on filing their case, and shall be distributed as follows :—Rs. 15 to the General Funds of the Chamber, and the remainder equally among the arbitrators.
- 13.—In a laborious case, involving the taking of evidence and more than two sittings, the fees shall be fixed by the General Committee, and distributed in the proportions above indicated. Any extra expenses incurred shall be borne by the disputants.

RULES AND REGULATIONS

*For the Measurement by Callipers upon Exports from Bombay
of Cotton, Wool, Hemp, and other Pressed Bales.*

I. CALLIPERS shall from time to time be submitted to the Secretary of the Chamber of Commerce, and, if found correct, shall be branded with a stamp bearing the name of the Chamber, to indicate the same.

II. If, from use or otherwise, any Calliper should get out of order and be objected to, the party objecting shall send the Callipers to the Chamber for examination, and should the objection be valid, the Chamber stamp shall be defaced by the Secretary. If, however, the objection is found to be groundless, the Secretary shall give a note to that effect, and the party objecting shall be bound by his decision.

III. Any Callipers found incorrect, and on which the stamp has been defaced, may be re-stamped after adjustment.

IV. No measurements shall be held good except such as are taken by Callipers bearing the Chamber's stamp.

V. Public Measurers shall be appointed under the authority of the Chamber of Commerce, and stationed at the different Bunders, to Measure pressed bales of Cotton, Wool, Hemp, and other merchandise.

VI. A Fee, the amount of which shall in no case exceed half an anna per bale, but which may be regulated by the Chamber from time to time in order to meet the expenses of the necessary establishment, shall be levied on all bales measured by the duly appointed Measurers.

VII. No bales shall be measured without the production of the Custom House Pass bearing the endorsement of the Measurement Fee Clerk, to the effect that the Fee has been paid.

VIII. The Measurers shall measure not less than five bales in every hundred, ascertaining the length of the bale and the greatest width and depth over the lashings, and as near the centre of the bale as possible, but not over the knots.

IX. The Mesurer shall give a Certificate of Measurement, which must accompany the bales to the ship or steamer, and shall furnish the Shipper with a copy thereof. This Certificate, which shall be retained by the ship, shall state—

The date and hour of measurement,	The name of the ship or steamer,
The number of the boat,	The number of bales,
The name of the tindal,	The marks of the bales,
The name of the shipper,	The measurement.

X. The Shipper shall, if required, in writing, give the Agent of the ship or steamer notice in writing, of the time when, and the name of the Bunder on which his bales will be measured, in order that the ship or steamer may be represented.

XI. The bales shall be alongside the ship or steamer within 36 hours after measurement, weather permitting, or the certificate shall be void, and the bales shall be re-measured on board, written notice, however, in

such case being given to the shipper, so that he may have the option of attending.

XII. The salaries of the Measurers, and all other expenses connected with this scheme of measurement, shall be paid by the Chamber from the Fee Fund raised under these Rules.

XIII. All matters pertaining to the measurement of Cotton, as defined above, including the appointment of the Measurers, the fixing of their salaries, the payment of the same, and the doing of all things necessary for a proper and economical working of the scheme, shall be placed in charge of the General Committee of the Chamber.

XIV. No refund of Measurement Fees shall be allowed for sums under one Rupee.

XV. No claim for refund shall be allowed, unless presented within one month from the date of vessel's departure.

GENERAL RATES OF COMMISSION.

Table of General Rates of Commission chargeable in Bombay, as revised by the Chamber of Commerce, and adopted at the General Meetings held on the 9th August, and the 31st of October, 1876.

IMPORT, EXPORT, AND GENERAL BUSINESS.

	Per Cent.
1. On effecting insurance	1
2. On settling insurance losses, whether partial or total, also on procuring return of premium, exclusive of commission on receipt of cash	2½
3. On the sale or purchase of goods of all denominations (except as under)	5
4. On purchases of all kinds with the proceeds of goods sold, and on which a commission of 5 per cent. has been previously charged	2½
5. On the sale or purchase of ships, houses, and lands, of opium, and of diamonds, pearls, and jewellery of all descriptions	2½
6. On the sale or purchase of treasure or bullion	1
7. On the sale or purchase of cattle	5½
8. On goods consigned which are disposed of by outcry or sent to a shop, on net proceeds	5
9. On goods consigned and afterwards withdrawn, invoice cost	2½
10. On guaranteeing the responsibility of persons to whom goods are sold on the amount of sale	2½
11. On attending the delivery of contract goods to the Government or individuals	2½
12. On collecting house rent	2½
13. On sale or purchase of private Bills of Exchange	1
14. On effecting remittances by Bills of Exchange	1
15. On exchanging Government Securities of all descriptions, or investing money therein, and on transferring Government paper from one constituent to another	½
16. On surrendering or depositing in the Treasury Government Securities of all descriptions	½
17. On recovering of bonds, or of bills for absentees overdue at the time of their being placed in the possession of the Agent	2
18. On debts when a process at law by arbitration is necessary	2½
19. On debts when recovered by such means	5
20. On managing the affairs of the estate for an executor or administrator	2½
21. On recovering funds from a bankrupt estate	2½
22. On guaranteeing bills, bonds, or debts in general, by endorsement or otherwise	2½
23. On bills of exchange returned, noted or protested	1
24. On granting and cashing letters of credit	2½
25. On becoming security to Government or public bodies in any case	2½
26. On depositing Government paper as security for constituents	1
27. On receipt or payment, at the option of the Agent, of all moneys not arising from proceeds of goods on which commission has been previously charged	1
28. In cases where the debtor side of the account exceeds the creditor side, including the balance of interest, commission to be charged at the rate of	1

NATIVE CONSIGNMENTS.		Per Cent.
29.	The recognised rate of commission in England on the sale of consignments from Bombay shall be $2\frac{1}{2}$ per cent., exclusive of brokerage and guarantee, and the same is added to the Scale of Commissions sanctioned by the Chamber.	

SHIPPING BUSINESS.

30.	On procuring freight...	5
	"When the freight is payable in sterling, the Commission shall be calculated on the sterling amount at the following rates for Bank Bills, viz., at the rate for 6 months' sight Bank Bills when the freight is by sailing ships, and at the rate for 3 months' sight Bank Bills when by steamers." Brokerage, when actually incurred, shall be considered a legitimate charge in ship's accounts.	
31.	On collecting freight ...	$2\frac{1}{2}$
32.	On tendering a vessel (if accepted) for the conveyance of troops; on the amount of the charter party ...	5
33.	On shipping goods of every description on which no commission for the purchase has been charged ...	$2\frac{1}{2}$
34.	On shipping treasure, bullion, and jewellery ...	1
35.	On ship's disbursements when in funds ...	1
36.	On ship's disbursements when not in funds ...	$2\frac{1}{2}$
37.	On account of passage-money, whether the same passes through the Agent's hands or not ...	5
38.	For executing orders to Charter or engage Tonnage in Bombay or at outports ...	$2\frac{1}{2}$
39.	On realizing Bottomry Bonds or negotiating any loan on <i>respondentia</i> ...	$2\frac{1}{2}$
40.	On landing and re-shipping goods from any vessel in distress, stranded, or wrecked, or on landing or selling by auction damaged goods from any such vessel, and acting as Agent for the Master on behalf of all concerned,—on the declared value of all such goods as may be re-shipped, and on net proceeds of all such goods as may be publicly sold ...	$2\frac{1}{2}$
	If Opium, Indigo, Raw Silk or Silk Goods ...	$1\frac{1}{2}$
	If Treasure, Precious Stones, or Jewellery ...	$\frac{1}{2}$
41.	On moneys expended, i.e., on all disbursements made in efforts to save Ship or Cargo ...	5
42.	On ships leaving the Port in ballast which have been consigned inward, 6 annas per ton upon the English net registered tonnage.	
43.	On steamers leaving the Port in ballast which have been consigned inward, 8 annas per ton upon the English net registered tonnage.	
44.	On Ships leaving the Port in ballast which have been consigned inwards and outwards, 12 annas per ton upon the English net registered tonnage.	
45.	On steamers leaving the Port in ballast, which have been consigned inward and outward, Re. 1 per ton upon the English net registered tonnage.	

Note applicable to Rates of Commission generally.—When the amount on which commission is payable is stated in rupees, the commission shall be calculated in that currency; and when in sterling at the rate provided for under Rule 30 of the General Rates of Commission which fixes the rate "on procuring freight."

SHIP FREIGHT INWARDS TO BOMBAY. PAYABLE IN BOMBAY.

THE Resolutions passed at the Special General Meeting of the Chamber on the 22nd March, 1871, regulating the payment in Bombay of Freight Inward to Bombay, were, at the General Meeting on the 9th August, 1876, in consequence of the altered condition of Exchange, cancelled as on the 1st January, 1877, from which date payment will be regulated in conformity with the following Resolution:—

46. "That the conversion into Indian currency of sterling freight inward to Bombay, payable in Bombay, shall, unless otherwise stipulated, be made at the rate for Bank Bills on London payable on demand; and that the rate ruling at the close of a mail shall be the rate applicable to such purpose during the subsequent week."
-

SHIP FREIGHT OUTWARDS FROM BOMBAY. PAYABLE IN BOMBAY.

RESOLUTION passed at the Annual General Meeting of the Chamber on the 31st October, 1876:—

47. "That difference of freight, outward from Bombay, stated in sterling, payable in Bombay (in the absence of any stipulation on the shipping order or charter party to the contrary), shall be converted into Indian currency at the rate for Bank Bills on London payable on demand; and that the rate ruling at the close of a mail shall be the rate applicable to such purpose during the subsequent week: 4½ per cent. as customary in the case of sailing ships and 2½ for steamers being allowed as discount to cover cost of insurance and interest until the due date of the freight."
-

ANTE-DATING BILLS OF LADING.

RESOLUTION passed at the Special General Meeting of the Chamber on 22nd July, 1881 :—

“That having considered the question of ante-dating bills of lading, either on dock receipts or for goods alongside, the Chamber is of opinion that such a proceeding is open to most serious objections and might involve grave responsibilities.”

SHUT-OUT CARGO.

RESOLUTION passed at the Special General Meeting of the Chamber on 22nd July, 1881 :—

“That in cases when shipping orders have been issued without any special stipulation in respect of shut-out cargo, the shipper, provided he has fulfilled the terms of his shipping order, shall have the right to demand a fresh shipping order in the first going vessel from the agent of the vessel that has failed to take in his cargo. If the latter declines or omits to grant this, that he should himself have the power to engage the necessary tonnage, and to claim on the said agent for any difference in freight or other expense to which he may have been put.”

DETENTION OF CARGO BOATS ALONGSIDE VESSELS.

RESOLUTION passed at the Special General Meeting of the Chamber on 22nd July, 1881 :—

“That while recognizing the grievance which exists, the Chamber is unable to recommend a remedy that would be mutually satisfactory to those interested.”

TONNAGE SCALE AT BOMBAY.

OLD SCALE.

STEAMERS.

At the Annual General Meeting of the Members of the Bombay Chamber of Commerce, held on Tuesday, 8th October, 1872, it was proposed by G. A. Kittredge, Esq., of Messrs. Stearns, Hobart & Co., seconded by Thomas Wilson, Esq., of Messrs. Antrobus & Co., and carried unanimously :—"That the subjoined Scale and the accompanying Rules be taken to regulate the steamer trade from Bombay and the Malabar Coast to the United Kingdom and the Continental Ports in Europe, in the absence of special agreement to the contrary" :—

1. That the Tonnage Scale for steamers shall be on the basis of 40 cubic feet and 16 cwt. dead weight to the ton.
2. That Hides and Skins, whether in bales or bundles, be taken by measurement and not by weight.
3. That Oil be taken on the outside measurement of the cask.
4. That when Freight is payable on weight, the same is to be on the nett weight delivered.
5. That these Rules and the subjoined Scale come into force for steamers from this date—Tuesday, 8th October, 1872.

SHIPS.

At a General Meeting of merchants held in the offices of the Chamber of Commerce, Bombay, on the 6th of June, 1856, convened by Circular under the direction of the Committee of the Chamber, William Forsyth Hunter, Esq., Chairman of the Chamber, in the chair, it was proposed by Henry Scott, Esq., of Messrs. Finlay, Scott & Co., seconded by John Campbell, Esq., of Messrs. Campbell, Mitchell & Co., and unanimously carried :—"That from and after the 1st of January, 1857, the following amended Scale be taken to regulate the Trade from Bombay and the Malabar Coast to the United Kingdom, in the absence of special agreement to the contrary" :—

Proposed by James Fleming, Esq., of Messrs. W. Nicol & Co., and seconded by William Trevor Roper, Esq., of Messrs. Lawrence & Co.,

and carried unanimously :—" That the Freight on Oil be paid on the full gauge of the cask, ascertained at the port of discharge."

Proposed by Thomas Stock Cowie, Esq., of Messrs. Remington & Co., and seconded by John Parsons, Esq., of Messrs. Cardwell, Parsons & Co., and carried unanimously :—" That when Freight is payable on weight, the same is to be on the Nett Weight delivered."

(Sd.) W. F. HUNTER, *Chairman*.

At the General Meeting of the Bombay Chamber of Commerce, held on 22nd July 1881, the following Resolutions were passed :—

- I. That the subject of the revision of the Tonnage Scale be laid before the next General Meeting, so that any member desiring the remeasurement of any particular article of export may have an opportunity of bringing forward his proposal by resolution.
- II. That the General Committee be authorized to add new articles to the Tonnage Scale after testing them, notice being given to members by circular, and to the public by advertisement, of the time and place of such testing, and that such additions, before being formally entered in the Tonnage Scale, shall be sanctioned at a General Meeting of the Chamber.
- III. That in any revision of the Tonnage Scale, which might be decided on by the Chamber, or any addition thereto, the present basis for ship and steamer tonnage shall be adhered to.

NEW SCALE.

At a General Meeting of the Bombay Chamber of Commerce, held on the 20th of July 1883, the following Resolution was passed :—

That Rule I. prefixed to the Tonnage Scale be cancelled, and the following rule be substituted :—That the Tonnage Scale for steamers shall be on the basis of 40 cubic feet to the ton, but in no case to exceed 20 cwt. dead weight.

ARTICLES.	STEAMERS OLD SCALE.	STEAMERS NEW SCALE.	SHIPS.
	To the Ton.	To the Ton.	To the Ton.
Aloes, in kegs ...	40 feet.	...	16 cwt.
Alum, in bags ...	16 cwt.	...	20
Annato, in cases ...	40 feet.	...	50 feet.
Apparel ...	do.	...	50
Arrowroot, in cases ...	do.	...	50 "

ARTICLES.	STEAMERS OLD SCALE.	STEAMERS NEW SCALE.	SHIPS.
	To the Ton.	To the Ton.	To the Ton.
Assafoetida, in cases ...	40 feet.	...	50 feet.
Bajree, in bags ...	16 cwt.	18 cwt.	20 cwt.
Barilla ...	1½ do.	...	20 "
Barley (in husk) ...	...	...	...
Bees' Wax, in cases ...	40 feet.	...	50 feet.
Betelnut, in bags ...	13 cwt.	...	16 cwt.
Blackwood, in straight square logs ...	40 feet.	...	50 feet.
Do. otherwise ...	16 cwt.	...	20 cwt.
Bone meal and bone dust ...	...	20 cwt.	20 "
Bones, crushed, in bags ...	...	...	...
Do. loose ...	...	...	...
Books ...	40 feet.	...	50 feet.
Borax, in cases ...	do.	...	50 "
Do. in bags ...	16 cwt.	...	20 cwt.
Buffalo horns, in bundles ...	...	6 cwt.	8 "
Bullion ...	per cent.	...	per cent.
Camphor, in cases ...	40 feet.	...	50 feet.
Canes, Rattans, in bundles ...	13 cwt.	...	16 cwt.
Cardamoms, in bundles ...	40 feet.	...	50 feet.
Cassia Lignea, Fistula, and Buds ...	do.	...	50 "
Chasum ...	8 cwt.	...	10 cwt.
China Root, in cases ...	40 feet.	...	50 feet.
Cigars ...	do.	...	50 "
Cinnamon, in bales... ..	...	...	6 cwt.
Do. in cases ...	40 feet.	...	50 feet.
Cloves, in cases ...	do.	...	50 "
Do. in bags or frazils ...	8 cwt.	...	10 cwt.
Coals ...	...	...	20 "
Cocoa, in bags ...	10 cwt.	...	12 "
Coculus Indicus, in bags ...	13 do.	...	16 "
Coffee, in cases ...	40 feet.	...	50 feet.
Do. in bags or frazils ...	12 cwt.	...	16 cwt.
Coir, in bales... ..	40 feet.	...	50 feet.
Do. in bundles or loose ...	5 cwt.	...	6 cwt.
Do. Rope, in coils ...	40 feet.	...	8 "
Colocynth, in cases ...	do.	...	50 feet.
Colombo Root, in bags ...	8 cwt.	...	14 cwt.
Copra, in robins ...	8 do.	...	12 "
Do. in bags ...	...	...	12 "
Coral, Rough (not specimen), in bags... ..	16 cwt.	...	20 "
Cotton Seed ...	...	...	...
Cotton, in bales ...	40 feet.	...	50 feet.
Cowries, in cases ...	40 do.	...	50 "
Do. in bags ...	16 cwt.	...	20 cwt.
Cubebs ...	10 do.	...	12 "
Cummin Seed, in cases ...	40 feet.	...	50 feet.
Cutch or Terra Japonica, in bags or baskets, unscrewed.	13 cwt.	...	16 cwt.
Dates, wet ...	16 do.	...	20 "
Do. dry ...	13 do.	...	16 "
Dhall, crushed ...	...	...	...
Dragon's Blood, in cases ...	40 feet.	...	50 feet.
Ebony, square and straight ...	do.	...	50 "
Do. otherwise ...	16 cwt.	...	20 cwt.
Elephants' Teeth, in cases ...	40 feet.	...	50 feet.
Do. in bundles..	14 cwt.	...	18 cwt.

ARTICLES.	STEAMERS OLD SCALE.	STEAMERS NEW SCALE.	SHIPS.
	To the Ton.	To the Ton.	To the Ton.
Elephants' Teeth, loose ...	16 cwt.	...	20 cwt.
Furniture. ...	40 feet.	...	50 feet.
Galingals. ...	10 cwt.	...	12 cwt.
Galls, in bags.. ...	13 do.	...	16 "
Do. in cases ...	40 feet.	...	50 feet.
Ginger, dry, in cases ...	do.	...	50 "
Do. in bags ...	10 cwt.	...	12 cwt.
Gram ...	15 do.	...	20 "
Groundnuts, shelled ...	13 do.	...	16 "
Do. unshelled ...	...	6 cwt.	8 "
Gums, of all kinds, in cases ...	40 feet.	...	50 feet.
Gum Olibanum, in bags ...	13 cwt.	...	16 cwt.
Hurtall, in cases ...	40 feet.	...	50 feet.
Hemp, in screwed bales ...	do.	...	50 "
Do. loose or in bundles ...	5 cwt.	...	7 cwt.
Hides and Skins, in screwed bales...	40 feet.	...	50 feet.
Do. loose and in small bundles.	do.	...	12 cwt.
Horns, Buffalo and Cow, loose	13 cwt.	...	16 "
Do. Deer, loose.. ...	6 do.	...	8 "
Horn Tips, of any kind ...	13 do.	...	16 "
Indigo, in cases ...	40 feet.	...	50 feet.
Jackwood ...	do.	...	50 "
Jowaree, in bags ...	16 cwt.	18 cwt.	20 cwt.
Lac Dye, in shells or cases ...	40 feet.	...	50 feet.
Lang, in bags ...	16 cwt.	18 cwt.	20 cwt.
Lang crushed ...	...	...	...
Linseed, in bags ...	16 do.	...	18 "
Mace, in cases ...	40 feet.	...	50 feet.
Maize ...	...	...	...
Mother-o'-Pearl, in cases ...	do.	...	50 "
Do. in bags ...	16 cwt.	...	20 cwt.
Mowra Flowers ...	16 do.	18 cwt.	20 "
Mowra Seed, in bags ...	13 do.	...	16 "
Munjeet or Madder Root, in cases or bales...	40 feet.	...	50 feet.
Do. in bundles or bags...	8 cwt.	...	12 cwt.
Musk, in cases ...	40 feet.	...	50 feet.
Mussor, in bags ...	16 cwt.	20 cwt.	20 cwt.
Myrabolams, in bags ...	13 do.	...	16 "
Niger Seed ...	14 do.	...	17 "
Nutmegs, in cases...	40 feet.	...	50 feet.
Nux Vomica, in cases ...	do.	...	50 "
Do. in bags ...	13 cwt.	...	16 cwt.
Oil, of any kind, in casks ...	40 feet.	...	210 Im. gals.
Oil-seeds—			
Castor Seed ...	14 cwt.	...	17 cwt.
Teel or Gingelly Seed ...	do.	15 cwt.	...
Rape Seed ...	do.	16 "	...
Mustard Seed ...	do.	16 "	...
Opium ...	per chest.	...	per chest.
Paddy, in bags ...	13 cwt.	...	16 cwt.
Pepper, in bags ...	13 do.	...	16 "
Pimento... ..	12 do.	...	14 "
Plumbago, in bags...	16 do.	...	20 "
Poppy Seed, in bags (1½ cwt.)	14 do.	...	17 "
Do. double bags (1½ ")	13 do.	...	16 "

ARTICLES.	STEAMERS OLD SCALE.	STEAMERS NEW SCALE.	SHIPS.
	To the Ton.	To the Ton.	To the Ton.
Poppy Seed, single bags (1½ cwt.).	14 cwt.	...	17 cwt.
Do. double bags (1½ ")	14 do.	...	17 "
Rattans, in bundles	13 do.	...	16 "
Do. Ground	13 do.	...	16 "
Red Wood	13 do.	...	16 "
Rhubarb, in cases	40 feet.	...	50 feet.
Rice, in bags	16 cwt.	18 cwt.	20 cwt.
Safflower, in cases	40 feet.	...	50 feet.
Do. in screwed bales	do.	...	50 "
Do. in bags	8 cwt.	...	10 cwt.
Sago, in cases	40 feet.	...	50 feet.
Sal Ammoniac, in cases	do.	...	50 "
Do. in bags	15 cwt.	...	18 cwt.
Salt	...	{ 28 Indian maunds of 82½ lbs.	28 Indian maunds of 82½ lbs.
Saltpetre	16 do.	...	20 cwt.
Sandal and Sapan Wood	11 do.	...	16 "
Sealing Wax, in cases	40 feet.	...	50 feet.
Senna, in bags	5 cwt.	...	6 cwt.
Do. in bales	40 feet.	...	50 feet.
Shells, Rough, in bags	16 cwt.	...	20 cwt.
Silk, in bales	8 do.	...	10 "
Do. in cases	40 feet.	...	50 feet.
Soap, in cases	do.	...	50 "
Sugar, in bags	16 cwt.	...	20 cwt.
Talc	16 do.	...	20 "
Tallow	40 feet.	...	50 feet.
Tamarinds	15 cwt.	...	18 cwt.
Tea, in chests	40 feet.	...	50 feet.
Timber, Teak : Square Planks and Poon	do.	...	50 "
Do. Round, one-fifth off	...	...	...
Tobacco, in bales	40 feet.	...	50 "
Tortoise Shells, in chests	do.	...	50 "
Turmeric, in bags	11 cwt.	...	13 cwt.
Tutenague	16 do.	...	20 "
Unrated Wood	11 do.	...	14 "
Whanghees (<i>vide</i> Canes)	13 do.	...	16 "
Wheat	16 do.	18 cwt.	20 "
Wines and Spirits, in casks	40 feet.	...	50 feet.
Do. in cases	do.	...	50 "
Wool, in screwed bales	do.	...	50 "
Zedory	16 cwt.	...	20 cwt.

* * The Standard Ton at Bombay for Measurement Goods shall be taken at 50 cubic feet for ships.

SCALE OF LANDING CHARGES, CHARGEABLE TO CONSIGNEES FOR THE LANDING OF GOODS.

*Sanctioned by the Bombay Chamber of Commerce, at the Annual
General Meeting of the Members held on the 30th of October, 1877.*

[These rates are understood to be maximum rates and to cover landing, crannage, and delivery on the Bunder, but not Bunder Fee.]

ARTICLES.	How Charged.	Ra. a. p.
Almonds	Bag.	0 1 0
Alum	Ton.	1 4 0
Arrowroot	In moras of 1½ cwt.	0 2 0
Do.	In cases of 1 cwt.	0 2 0
Asphalte	Ton.	1 4 0
Assafoetida	Bag.	0 6 0
Beer and Porter	Hogshead,	0 8 0
Beads	Case.	0 5 0
Bollers	...	Special.
Books	Ordinary Case.	0 5 0
Boots	Case.	0 5 0
Borax	Do.	0 5 0
Brassware (with crannage)	Ton.	1 12 0
Do. (without do.)	Do.	1 4 0
Brass Leaves	Case.	0 2 0
Bricks, Fire	Ton.	1 4 0
Bullion	...	Special.
Camphor	Case.	0 4 0
Do.	Tub.	0 1 6
Candles	Cwt.	0 3 0
Canvas	Bale.	0 5 0
Cardamoms	Bag.	0 2 0
Do.	In cases of 2 cwt.	0 6 0
Carpets	Package.	0 7 0
Carriages	Each.	8 0 0
Cashewnuts	Bag.	0 2 0
Cassia	Case.	0 3 0
Cement	Ton.	1 12 0
Chalk	Do.	1 4 0
Chillies	Bag.	0 1 0
Cheroots	In cases of 10,000	0 8 0
Clay, China, or Fire	Ton.	1 12 0
Cloves	Bag not exceeding 1½ cwt.	0 1 3
Cochineal	Case.	0 5 0
Cocanuts	Bundle.	0 2 0
Coal (on the South of the P. & O. Co.'s Dock)	Ton.	0 12 0
Do. (on the North of the P. & O. Co.'s Dock)	Do.	1 0 0
Coffee (in Bags)	Do.	1 8 0
Cuir	In bundles of cwt.	0 1 0

ARTICLES.	How Charged.	Rs. a. p.
Copper and Yellow Metal (in Cases)...	Ton.	1 12 0
Do. do. (in Cakes or Slabs)	Do.	1 6 0
Copra	Bag.	0 1 0
Do.	Robbin.	0 2 0
Copperas or Sulphate of Copper ...	Ton.	1 12 0
Cotton, Full-pressed Bales...	Bale.	0 5 0
Do. (Unpressed) in Docras and		
Half-pressed Bales	Cwt.	0 1 6
Crackers	Case.	0 4 0
Crockery	Cask or Crate.	1 0 0
Dates, dry (in Mats or Bags) ...	Cwt.	0 1 0
Do. wet (do. do.)	Do.	0 1 0
Drugs	Bag or Case.	0 5 0
Fishmaws and Sharkfins	Bag.	0 4 0
Flax	Bale.	0 5 0
Flour	Ton.	1 12 0
Fruits, dried (in Bags, &c.)...	Cwt.	0 1 0
Ghee	Dubber.	0 4 0
Ginger, dried	Case or Bag.	0 3 0
Glass, Window	Case.	0 2 0
Grain of all sorts	Bag.	0 1 0
Groundnuts	Do.	0 1 0
Gums (in Bags)	Cwt.	0 1 0
Gunny Bags	Bale.	0 6 0
Do. Bundles (Bundle of 50)	Bundle.	0 1 0
Haberdashery and Millinery ...	Small Case.	0 4 0
Do. do.	Large do.	0 6 0
Hardware (with crantage)	Ton.	1 12 0
Do. (without do.)	Do.	1 4 0
Hides (in pressed Bales)	Cwt.	0 1 0
Indigo	Case.	0 6 0
Ironmongery (with crantage)	Ton.	1 12 0
Do. (without do.)	Do.	1 4 0
Iron (Loose and in Bundles) ...	Do.	1 4 0
Do. Pig	Do.	1 0 0
Jaghery	Bag.	0 1 0
Jute	Bale.	0 5 0
Lashings	Do.	0 5 0
Lead Sheets	Ton.	1 12 0
Macs'	Case.	0 3 0
Machinery (weight or measurement	{ In pieces under a }	1 12 0
as per Bill of Lading)		
Marble Slabs	Do.	2 0 0
Matches	Case.	0 5 0
Mats of sorts	Cwt.	0 1 0
Medicine	Case.	0 5 0
Millinery and Haberdashery ...	Small Case	0 4 0
Do. do.	Large do.	0 6 0
Nuts of sorts (in Bags)	Cwt.	0 1 0
Nutmegs (in Bags or Cases) ...	Do.	0 1 0
Oils (in Casks)	Ton.	2 0 0
Oil (Kerosine)	Case.	0 1 0
Oilmanstores	Large Case.	0 3 0
Do.	Small do.	0 1 0
Paper	Bale or Case.	0 5 0
Do. China	Do.	0 3 0
Paint (in Oil)	Ton.	2 8 0
Pepper (in Bags)	Cwt.	0 1 0
Pianos	Each.	5 0 0
Piece Goods from Europe	Bale or Case.	0 5 0

ARTICLES.	How Charged.	Rs. a. p.
Porter and Beer	Hogshead.	0 8 0
Quicksilver	Bottle.	0 3 0
Red Lead	Ton.	1 12 0
Rice	Bag not exceeding 1½ cwt.	0 1 0
Rope (with crantage)	Ton.	2 0 0
Do. (without do.)	Do.	1 8 0
Saffron	Case.	0 5 0
Safflower	Bag.	0 2 0
Saltpetre (in Bags)	Cwt.	0 1 0
Seeds, in Bags	Do.	0 1 0
Sharkfins and Fishmaws	Bag.	0 4 0
Shells (Mother-o'-Pearl), in Bags	Cwt.	0 1 0
Shellac	Case.	0 4 0
Silk, China	Bale.	0 6 0
Do. Pieces	Case.	0 6 0
Skins, Goat (in Bales or Bundles)	Cwt.	0 1 0
Spelter	Ton.	1 4 0
Spices, in Bags or Cases	Cwt.	0 1 0
Spirits, Wine and Beer, per dozen Quarts or 2 dozen Pints	Dozen.	0 1 0
Stationery	Package.	0 5 0
Steel (in Kegs and Loose)	Ton.	1 4 0
Sugar	Bag not exceeding 1½ cwt.	0 1 3
Sulphur	Ton.	1 12 0
Tallow	Cask.	0 5 0
Tea	Half Chest.	0 1 0
Do.	Whole do.	0 2 0
Timber, Logs and Squares	Ton of 50 C. Feet.	1 4 0
Do. Scantlings, Shingles, &c.	Do.	1 8 0
Tin Plates (in Boxes)	Ton.	1 4 0
Tobacco	Case.	0 4 0
Turmeric	Bag.	0 1 0
Tusks, Elephant	Bundle.	0 6 0
Do. do.	Piece.	0 2 0
Twist or Yarn	Bale.	0 5 0
Umbrellas	Case	0 5 0
Vermilion	Do.	0 4 0
Wine and other Liquors	Hogshead.	0 10 0
Do.	Quarter-Cask.	0 5 0
Wool, Pressed	Bale.	0 5 0
Do. Unpressed	Bora.	0 8 0
Yellow Metal and Copper (in Cases).	Ton.	1 12 0
Do. do. do. (in Cakes & Slabs)	Do.	1 6 0

Bombay Port Trust.

Bye-laws for the Regulation and Management of the Wet Docks of the Bombay Port Trust, made under the provisions of Section 73 of Act VI. the "Bombay Port Trust Act" of 1879, and approved by the Government of Bombay under Section 74 of the same Act on the 17th day of December, 1879.

1. Before a vessel is brought into the Dock Channel, the Master shall furnish to the Dock Master, and will verify the correctness thereof by his signature, the full information required on the printed form attached (Appendix A), which will be supplied on application, and on no account is a vessel to enter the Dock Channel until a permit has been obtained from the Dock Master on the form given in Appendix B. The entire responsibility for any accident whatever which may result from inaccurate or incorrect information having been furnished will, in addition to the prescribed penalty, devolve upon the Master or Owners of the vessel furnishing it.

2. Masters of vessels shall obey all directions of the Dock Officers in relation to the rotation and manner of navigating the Dock Channels and of coming into or going out of Dock, and shall not offer any obstruction to the opening or shutting of gates; and no person shall open or shut, or attempt to open or shut, any Dock Gate, Sluice or Valve, nor any Swing Bridge, without the authority of the Dock Officers.

3. No vessels shall attempt to navigate under sail within the Dock Channel or entrances, but steam-power will be employed, and steam-vessels should have their engines in readiness and available for this purpose, supplemented by a Tug if required. In the event of efficient steam-power not being provided by the Master or Owners, or when necessary, the Dock Master is authorized to employ the Trustees' or other available Steam Tug for duties in connexion with vessels docking, undocking or navigating the Channel, and the Master or Owners of the vessels will be charged at a fixed rate for the use thereof.

4. Vessels on entering the Dock Channel shall have a boat with four men in attendance for running out lines to the Pier Heads for hauling into Dock, and shall have in readiness and supply for use such (steel wire or other) hawsers as may be required, also guy lines of at least 30 fathoms in length for each bow and quarter, and such other ropes, lines, and fenders, &c., as may be necessary to facilitate and to protect the vessel from injury whilst hauling into or out of Dock, and failing these being provided by the vessel, the same may be supplied by the Dock Master, and a fee of Rs. 30 shall be paid by the Master or Owners for the use thereof. In the latter case, although endeavours will be made to provide efficient ropes, hawsers, &c., for this purpose, the Trustees or their Officers will not be responsible for accidents resulting in damage to the vessel from their proving defective or inefficient, or from their breaking whilst in use.*

5. Vessels shall have their lower yards peaked when hauling into or out of the Docks, or when navigating the Dock Channels

* NOTE.—The check ropes for guiding vessels into dock and the extra labour required at the Pier Heads will be supplied free of charge. The fenders at the Pier Heads will also be maintained by the Trustees without charge.

or removing from one part of the Dock to another, or when lying therein, the spritsail yard or whiskers shall be fore and aft, and all other yards braced within the beam ; the jib-boom is to be run in within three feet from the bowsprit cap ; the flying jib-boom, studding sail booms, and irons (if any) are to be taken off ; the main or mizen-boom and stern davits are to be rigged within the taffrail ; the quarter davits and bumpkins rigged in within the beam of the vessel ; and the flukes of the anchors are to be above water ; and immediately after having been brought into Dock, the anchors shall be got in on the forecastle rail or deck, with the stocks placed in a perpendicular position close to the cat-head.

6. Masters or Owners shall employ and have in readiness a sufficient number of riggers, labourers, appliances, &c., on board and on shore for working vessels in, out of, and about the Channels, Entrances, and Docks ; failing this being done, or whenever necessary, the Dock Officers may employ such number or quantity of either or all of them as may be necessary, at the risk and expense of the Master or Owners.

7. Masters or other persons in charge of vessels in the Harbour near the entrance to the Dock Channel, or in the fair way of the Channel, or near the Dock Entrances, shall remove the vessels when required to do so by the Dock Officers, and in the event of their failing to do so promptly, the removal may be effected under the orders of the Dock Officers ; the expense in the latter case shall, in addition to the prescribed penalty, be paid by such Masters of vessels.

WITH RESPECT TO THE MANAGEMENT OF THE DOCKS AND QUAYS.

8. No vessel shall be entitled to a berth until one has been specially allotted at the Dock Master's Office.

9. All vessels while in Dock are in the charge of the Masters and Owners, and it is the duty of the Master, Officers and Crew to transport their respective vessels with their own warps and appliances under their own responsibility to or from any part of the Dock, but always under the direction of the Dock Master or his Assistants ; and to see that all gangways are securely placed, and that all hatches are covered and secured to guard the safety of life and property at sunset, or when not in use, for which the Ship's Officers are alone responsible.

10. Masters and Owners of vessels shall obey the directions of, and shall offer no obstruction to, Dock Officers as to the mooring, unmooring, moving or removing any vessel from one part of the Dock to another part ; or in regulating the position, loading and discharging of such vessels, and the Quay space to be occupied by such vessels ; and all expenses incurred by Dock Officers in carrying out this enactment shall, in addition to the prescribed penalty, be also paid by such Masters or Owners ; but no vessel shall be removed from its berth without the consent of the Dock Master being obtained in writing as to the mode and time of removal.

11. All vessels in Dock shall be kept so loaded or ballasted as to allow of their being safely removed in the event of fire or other emergency arising.

12. Fair proportion of Quay space so far as available shall be appropriated to each vessel, and in case of difference or dispute, it shall be determined by the Traffic Manager.

No. 12 A.—Vessels occupying Quay side berths shall give such facilities for loading and discharging cargo to and from vessels occupy-

outside berths as the Dock Superintendent may consider reasonable, and the Trustees will not be responsible for delay, demurrage or otherwise, by reason of overside loading or discharging being impeded by vessels being over-lapped or double-banked.

13. No Ballast, Baskets, Bottles, Oakum, Stones or other loose material shall be laid upon any Quay or Pier within three yards from the margin of the Dock or Harbcur; and no ballast, ashes or other substance or rubbish shall be thrown or allowed to fall into the Dock Channels or Dock, or from any Pier or Quay.

WITH RESPECT TO THE LOADING AND UNLOADING OF CARGOES, AND THE TRANSPORT, DEPOSIT AND STORAGE OF GOODS ON THE QUAYS, WHARFS AND PREMISES OF THE DOCKS AND REMOVAL THEREFROM.

14. "No person shall without authority deposit on the Quays, in the sheds, or in any other part of the Dock enclosure, any ashes, bilge water, cinders, dirt, dung, dust, rubbish sewerage, refuse, or shavings."

15. Masters of vessels loading or discharging Ashes, Ballast, Bricks, Cinders, Coals, Dust, Lime, Rubbish, Shingle, Stones, Tiles, or any other loose matter or thing, shall use for such purpose a canvas, cloth or wooden shoot, to the satisfaction of the Dock Master.

The following addition is made to Bye-law No. 15 :—

"Ashes, cinders, dust, and rubbish must be landed on the Quay in such place as may be directed by the Dock Superintendent, and removed by carts. A single wharfage rate will be charged for the first day after landing, and if by that time the ashes, &c., shall not have been removed, they will become the property of the Trust, and the wharfage rate will not be charged. Coals, coke and other loose materials must not be discharged into cotton or other low-sided boats, but into boats with sides of sufficient height to prevent any of the cargo falling over-board into the dock."

16. Vessels shall not be repaired in such manner as to allow any cotton or other loose material, or any chips, pieces of wood or other like material to fall into any Dock, Basin, or Entrance, or without having a canvas shoot or other safeguard so secured from the side as to prevent such cotton, &c., from so falling.

17. No stages, planks or poles provided by the Trustees for vessels loading or discharging shall be used without a written order from the Traffic Officer; and when the discharging or loading is completed, they shall be replaced on the Quay as the Traffic Officer may direct; and all loss or damage thereto shall be made good at the expense of parties using them. All stages, planks, or poles not provided by the Trustees after use in discharging or loading, shall be removed within two working hours from the Dock Quays.

18. No vessel shall commence discharging her cargo in the Dock until after she has been moored at a berth appointed for her discharge.

19. The Trustees will not take charge of or be responsible for any goods discharged from any vessel when the same is not properly berthed according to the Trustees' rules.

20. Masters of vessels about to discharge at the Dock shall not break bulk until a true copy of the Manifest or the Master's copies of the Bills of Lading have been deposited in the Traffic Office. The copies of the Bills of Lading shall be returned after discharge of the inward cargo.

21. Masters of vessels shall not refuse or neglect to produce any book, voucher or other document in connexion with the landing or shipping of cargo.

22. Masters of vessels shall be responsible for the proper slinging of cargo when discharging.

23. Packages of cargo shall be slung under the hatchway, and under no circumstances whatever shall cranes be employed in breaking out cargo or removing it from under the combings.

24. Masters of vessels will be responsible that single packages over $1\frac{1}{2}$ tons in weight are not hoisted by the Dock cranes until the correct weight has been ascertained and a crane of sufficient power obtained.

25. When discharging iron Drainage Pipes or other goods which from their want of description or want of proper distinguishing marks there will be difficulty in delivering correctly to consignees, the Master of the vessel shall separate before landing, or in the course of landing, the various marks and consignments, failing which the Trustees will either refuse to receive the goods or will charge the cost of sorting.

26. Nitro-glycerine, Petroleum, Naphtha, Dynamite, Gunpowder, and other dangerous explosive substances will not be admitted into the Dock, and any vessel having such explosives on board must discharge them before entry into the Dock.*

27. No dangerous explosive substances will be permitted to be brought on the Dock premises, and the Trustees may remove such goods at the risk and expense of the owner.*

27 A. Bye-laws 26 and 27 do not apply to service ammunition, whether for small arms or artillery, embarked or disembarked with troops.

28. Masters of vessels shall furnish special notice to the Shed Officers before attempting to land any other packages containing articles or goods liable to ignition or explosion, or which are otherwise dangerous.

29. Acids, Aquafortis, Oil of Vitriol, Lucifer Matches, or other goods of a dangerous nature shall not be placed on any Quay unless distinctly marked as such outside the package, and even then not without obtaining the written permission of the Traffic Officers, and in the event of such goods having been so placed by authority, they shall be removed from the Quays or vessels within two hours after notice from the Traffic Officers, and if not so removed, the Traffic Officers may remove them at the cost of the Owner, and such goods, if allowed to remain within the Dock premises, must be watched continuously by or at the expense of the Owners of such goods or the Master of the vessel; and failing this being done, the Traffic Officers may cause the same to be watched at the Owner's expense.

30. No timber shall be discharged into the Docks without the consent of the Dock Master, and if so discharged by consent, shall be removed within twenty-four hours afterwards; and any timber laid on any Quay or other place, shall not be permitted to remain beyond the time allowed by the Traffic Officers.

31. Goods landed at the Dock shall only be delivered on produc-

* NOTE.—Bye-laws 26 and 27 do not apply to service ammunition, whether for small arms or artillery embarked or disembarked with troops.

tion of the Bills of Lading, accompanied by a delivery order from the Master or Agents of the vessel.

32. Every Bill of Lading shall be specially endorsed, so as to clearly designate the party to whose order the contents are to be delivered.

33. In all cases of informality in Bills of Lading from want of endorsement, &c., application must be made by letter showing the circumstances and enclosing any documents which will show the title to the goods; in every such case the applicant must engage to indemnify the Trustees by bond or otherwise, as may be directed.

34. When Bills of Lading are produced which are at variance with the Manifest as to the original Consignee, delivery may be refused until the discrepancy is explained to the satisfaction of the Traffic Manager.

35. Consignees applying for delivery of goods shall fill up a form in duplicate, showing the quantities and weights or measurements, but not the Wharfage or Landing charges payable thereon. This form, accompanied by the Custom House Bill of Entry, shall be presented at the Traffic Office, where the charges will be received and a receipt granted. The receipt, accompanied by the Bill of Lading and the Delivery Order from the Master or Agents of the vessel, shall then be handed to the Shed Officer, who will examine the documents, and on being satisfied that they are in order and on being furnished with an acknowledgment for the goods, will grant delivery and authorize the Gatekeeper to pass the said goods.

36. No person shall remove from the Wharves or Sheds, any goods other than those covered by the Custom Bill of Entry and the Port Trust Wharfage Receipt.

37. No Delivery Order can be received until the manifest of the cargo, duly certified by the Captain, has been deposited in the Traffic Office.

38. Permission to Consignees from the Collector of Customs to open packages shall be countersigned by the Traffic Officer, and the opening of such packages without their condition being questioned shall be considered as delivery by the Trustees, and no claim for damage subsequently discovered will be admitted.

39. Packages which have been opened for appraisement, or by order of the Collector of Customs, shall lie at the risk of the Owner, Consignee, or Agent.

40. Goods taken delivery of but not removed from the Dock enclosure, shall lie at the risk of the Owner or Consignee.

41. The responsibility of the Trustees for the condition or safe keeping of goods imported into or exported from the Docks, does not commence until such goods have been received charge of by the Traffic Officers; and the Trustees will not be answerable or liable for deficiencies of merchandise produced by natural or unavoidable causes, nor for any losses or deficiencies whatever unless ascertained and pointed out to the Traffic Officers previous to the goods being removed from the Dock premises. The Trustees will not be liable or responsible in any way for lost or damaged goods, *e.g.* chafages, breakages, and short deliveries, of

which notice has not been given within one month from the date of landing or shipping as the case may be.

42. Packages containing Bullion, Specie, Precious Stones, Gold Dust, Jewellery, or other property of considerable value, whether cargo or private property, must be delivered to the Consignees by the Master or Owners of vessels under their own responsibility, unless, under special circumstances, they may be desirous of placing the same in charge of the Traffic Manager; in which case it must be separately noted in the Manifest or List of Cargo handed in, and specially handed over to the Traffic Manager himself, and a distinct receipt obtained from him for them, and a special rate will be charged for the storage thereof.

43. In case delivery of goods is made over the vessel's side into boats, the Master must take such steps as he may think necessary to protect his Owners in respect to their freight.

44. Goods landed and placed in the custody of the Trustees will be detained for freight on due notice being given in writing by the Owner, Master, or person interested therein, but goods *delivered into craft or floated in the Dock to be removed elsewhere*, cannot be detained. Goods under stop for freight will not be delivered nor warrants granted until the stop has been removed, or the amount claimed for freight deposited with the Trustees.

45. No stop for freight can be received after the goods have been transferred or a warrant granted.

46. The Trustees are not responsible for detention or delay of vessels, barges, lighters or other craft coming in, remaining in, or going out of Dock, or for detention or delay in the discharge of vessels, or in the progress of barges to or from the Dock owing to a glut of vessels or goods, or for a stoppage in the delivery of goods from the like cause.

47. No person, unless duly permitted by the Traffic Manager or Dock Master, shall take inside the Dock premises Carpenter's tools or other instruments used for opening cases, and no Cooper shall be allowed to work in the sheds without a license from the Traffic Manager.

48. No Stevedores or Muccadums will be allowed to work cargo on board any vessel in the Dock, but such as are licensed under the authority of the Trustees.

49. Goods for shipment will not be put on board unless the Customs export note, the Trustees' Receipt for Wharfage and Shipping Charges, and the Shipping Order are produced.

50. Goods shall not be laid on any Quay before the ship is ready to receive them, nor within four feet of any tramway, cartway or footway at any time, nor under any shed, so as to prevent the free working of the gates.

51. Owners, Masters, Bargemen, and others are liable for damage done by their vessels, craft or servants to works or property of the Trustees, and vessels may be detained until security has been given for the amount of damage done.

52. Every Barge or Cargo Boat remaining in the Dock more than 12 hours after having received or discharged her cargo, will be sub-

jected to a charge as under for every day or part of a day while she shall so remain :—

	Rs. a.
¹ Cargo Boat or Barge up to 15 tons	0 8
Do. above 15 and up to 25 tons.....	0 12
Do. above 25 tons	1 0

53. The admission of carts and carriages within the Dock premises, and their control when on the premises, will rest with the Traffic Officers.

54. All the Quays, Sheds, Gates, and the land within the Dock fence will be in charge of the Traffic Manager, who will manage all operations connected with the landing and shipping of goods, storage in the sheds and in the open, proper custody of all goods within the enclosure, exclusion of improper characters, and take whatever steps may be necessary for the proper maintenance of order on the premises.

55. The gates and wickets of the Dock premises will be kept open at hours fixed by the Trustees, and ingress and egress at unauthorized hours will only be allowed to persons holding passes signed by the Traffic Manager or other officer authorized by him, or by the Dock Master.

56. Only the crews of vessels in Dock, and labourers or other persons in the service of the Trustees, or those who hold pass tickets or orders granted by the Dock Master or Traffic Manager, shall be employed in the loading or unloading of vessels, or in any other work or labour to be performed, whether on board vessels or lighters, or on shore within the Dock premises.

57. Articles shall not be drawn over the Dock Bridge except upon wheel carriages, and they shall not be allowed to trail or drag upon the Bridge. No vehicle shall be permitted on the Bridge which with its load exceeds ten tons in weight, or has more than a concentrated load of five tons on two wheels equally distributed.

58. Working hours at the Dock shall be from sunrise to sunset except on holidays and Sundays. The sanctioned holidays recognized by the Trustees will be Christmas Day, New Year's Day, Good Friday, the Sovereign's Birthday, and any Fast or Thanksgiving days ordered by Government, or on any special occasions ordered by the Trustees. "In computing the days for charging rents, Sundays and the holidays enumerated above, as well as any days on which Imperial duty may not be received, will be omitted."

The following addition is made to No. 58 of the Bye-laws for the regulation and management of the wet docks of the Bombay Port Trust :—

"The day on which goods are landed will be counted as one of the 'free days,' except when goods are landed after sunset, when the free days will not commence until the following morning."

59. Application to work at night or on Sundays or on holidays will be made to the Traffic Manager, who, on production of the necessary permission from the Customs Department, will order all the necessary arrangements for the proper conduct of business. Such work will be charged the extra rates fixed by the Trustees.

60. The Dock Master will not take any vessel out of Dock unless the Master produces a receipt showing Dock Dues to have been paid, and that no claims stand against the vessel.

WITH RESPECT TO THE PIERS, WHARFS, QUAYS, DOCK PREMISES AND CHANNELS AND THE VESSELS AND OFFICERS AND CREWS THEREOF WHILST USING THEM.

61. The Crews of vessels in Dock will only be permitted to enter or leave the Dock after the hour of closing by means of a Pass, signed by the Commander or Officer in charge, and countersigned by the Dock Master or his Assistant.

62. Any anchor dropped in or near the Dock Channel, or entrance of the Dock shall be buoyed, and in no case shall it be left there for longer than one tide.

63. Any person who shall cut, deface or injure any mooring, rope, chain or any buoy, buoy-rope, or cable belonging to any anchor within the Channels, Entrances, or Docks shall, in addition to the prescribed penalty, be required to pay the amount of damage, repair, and recovery.

64. All the ship's water-closets and latrines must be thoroughly cleansed and securely fastened up before the vessel enters the Dock, and no use whatever shall be made of them during the vessel's stay in Dock. Latrines and Urinals will be provided on the Dock premises, and Commodes will be supplied for the Masters of ships.

65. Whilst a vessel is in Dock, the Master or some other responsible officer must always be on board in charge, and must superintend and assist in carrying out all duties in connection with the vessel or its cargo.

66. Whilst in Dock every vessel shall have a ship-keeper on deck two hours before and one hour after high water, and such ship-keeper shall carefully attend to the moorings of the vessel and the sufficiency thereof, and cause them to be slackened or hove in from time to time as necessary on rise or fall of water; and failing to do so, the Master or Owner shall be responsible for all damage from neglect.

The following Dock Bye-law is substituted for No. 67 of the Bye-laws already sanctioned under the provisions of Sections 73 and 74 of the Bombay Port Trust Act, 1879:—

67. When berthed or moored in the Dock a ship's propellers shall not be worked for trial by the main engines without due notice being given to, and permission obtained in writing from, the Dock Master. Masters and Owners, in addition to the prescribed penalty, will be held responsible for any damage that may result from the working of their ships' propellers either by hand or steam.

68. Projections from the deck of any vessel which interfere with another vessel loading or discharging shall be removed on requisition by the Dock Master.

69. The Master shall not permit the lines or ropes of any vessel in the Dock to be made fast to the Lamp Posts on the Wharfs or Quays, or to the Pillars of any shed, nor to any other place than the Samson posts, bollards, mooring posts, cleats, ringbolts, or other appliances specially provided for the purpose.

70. No Pitch, Resin, Tallow, or other inflammable materials shall on any account be melted on board-ship, or in boats, or on the Quays, except in such manner and in such places as shall be pointed out by the Dock Master, or the Traffic Officer, nor shall any Pitch, Tar, Oil, Flax, Oakum, Straw, Shavings, or other inflammable or combustible article be allowed to remain on the deck of any vessel, nor in boats nor on the Quays.

71. All Boats, Barges, &c., within the Dock are at the risk of their

Owners, who will be held responsible for any damage which may occur whilst navigating them, or by their getting adrift.

72. No fender that will not float shall be used over the side of any vessel. Sails shall be furled before sunset.

73. Bells are not to be struck to denote the hour on board ships in Dock.

74. No vicious or dangerous animals, and no loaded gun or other fire-arm, shall be kept on board any vessel in Dock.

75. Masters of vessels shall be answerable for the acts of their crew or persons employed about such vessels.

76. The Port Officer is empowered to order the immediate removal from the Dock of ships having on board animal manures or other offensive or dangerous cargoes or persons with infectious diseases.

77. No person shall molest, assault, resist, hinder, obstruct, impede or interrupt, or offer or attempt to molest, assault, resist, hinder, obstruct, impede or interrupt any employé of the Trust in the execution of his duty, or disobey his lawful orders, or use abusive or offensive language, or aid or incite others to do so.

WITH RESPECT TO FIRES AND LIGHTS.

78. Smoking and the use of any unprotected fire or light in any shed or warehouse within the Dock enclosure, is strictly prohibited.

79. No person shall smoke Tobacco or other substance, or ignite Lucifer Matches, or other inflammable articles, on any Pier or Quay, or on board any vessel within the Dock, except in such places as may be allotted for the purpose.

80. Fires of coal, charcoal or coke may be used in the cabins, deck-houses, forecastles, and cabooses of vessels in Dock between 5 o'clock A.M. and 9 o'clock P.M., subject to being prohibited (on any abuse) by the Port Officer.

81. Fires for donkey engines, steam winches, and portable forges are also permitted during working hours, and for ship's Engines for a reasonable period (say 3 hours) before a ship leaves, and (say 2 hours) after a vessel is berthed in the Dock.

82. All lights, whether oil lamps or candles, used on board vessels in Dock except as mentioned in clause 83, shall be in globes or secured lanterns.

83. Naked lights may be used only in the Engines and Boilers of vessels whilst under inspection and repair, or in duties connected therewith.

84. While any fire or light is lighted, at least one person on board is to be specially charged with the care thereof; and no fire or light is to be left or used in so rash, careless or negligent a manner as to risk or endanger the safety of or to ignite any goods, property or vessel in the Docks, or on the Dock premises.

85. All applications for special permission to use fires at any other than the prescribed hours, shall be made in writing to the Dock Master before 5 o'clock P.M., and shall specify the circumstances under which the request is made; if granted, the application, after having been endorsed by the Dock Master, is to be retained on board by the person charged with the care of the fire, and is to be exhibited by him to the Dock and Police officials, whenever demanded, and is to be returned to the Dock Master by 10 o'clock A.M. on the following day.

86. Vessels in Dock and all parts thereof shall be held or made free

and accessible to the Dock and Police officials for their inspection in regard to fires and lights whenever they demand it, and no person shall disobey any order of any Police Officer or Watchman for extinguishing any fire or light used in contravention of these Bye-laws.

PENALTIES.

87. Any person convicted of having committed a breach of any of the foregoing Bye-laws, shall be liable to a penalty not exceeding (100) One Hundred Rupees. (*Section 75 of Act VI. of 1879.*)

The following additional Bye-laws for the regulation and management of the Wet Docks of the Port Trust have been published under the provisions of Sections 73 and 74 of the Bombay Port Trust Act, 1879 :—

1. Agents, Charterers or Masters of vessels shall send to the Dock Superintendent's Office separate written application for each vessel desiring to enter the Dock, stating vessel's name, and whether laden with coal, or other cargo, or in ballast.

2. Steamers bringing import general cargoes or State Railway stores desirous to discharge on the Dock wharf shall get preference over all other vessels, even without previous application, and shall be assigned earliest berths after arrival.

3. A vessel having discharged imports shall have the right to remain in her berth to load, only if the spaces emptied by discharge are at once filled with exports. Any delay in doing this will cause a vessel to forfeit her right to remain in her unloading berth, and if thus moved she shall take her turn for a fresh berth with vessels that may enter the Dock only to load.

4. In the case of vessels arriving in ballast the Port Officer shall furnish the Dock Superintendent with a daily return of the arrival and hour of anchoring of such vessels, and the Pilot's return to the Port Officer on these points shall decide the order in which such vessels shall obtain berths in the Dock, provided that application for a berth has been made previous to or on arrival.

5. In the case of water ballast steamers arriving coal-laden the Masters shall furnish to the Dock Superintendent, through their Agents, certificates of date and hour of final discharge; if the certificates be not complete as to entire discharge of inward cargo, or if he otherwise thinks it necessary, then the Dock Superintendent shall have the right to verify the correctness of the certificate by personal inspection of the vessel. Time of final discharge shall decide the turn the vessel is to take, always provided that she has applied for a berth previous to or on arrival.

6. Dry bottom ships (*i. e.*, vessels not provided with water ballast) shall be considered as ready to enter the Dock when the Dock Superintendent receives a certificate that the vessel in question has discharged 90 per cent. of her coal cargo, and that she cannot discharge the remainder until she takes in "stiffening" in Dock.

7. No berth shall be named or shed set aside for any vessel until she is reported ready to enter the Dock, when, if a berth is available, the Dock Superintendent will inform the Dock Master, who in his turn will intimate to the vessel the berth assigned, and will arrange for docking her.

8. Stage or pontoon berths shall be used when practicable, and when the necessary Quay space can be made available.

9. The "Ibis" wharf shall be considered a loading berth, and a vessel so berthed shall haul off when packages weighing over 1½ tons require to be discharged there from any other vessel.

10. Vessels loading by stage, or by pontoon, or at the "Ibis" wharf, shall get full Quay side berth in turn when one becomes vacant in preference to other vessels that have not entered the Dock.

(APPENDIX A.)

To

The DOCK MASTER
of the PRINCE'S DOCK,
Bombay.

Sir,

I have the honour to request that the undermentioned Vessels, of which I am Master, may be received into Dock on the _____ or as soon as practicable.

Name of Ship or Steamer _____

Do. of Owners _____

Description of Cargo _____

Gross Register Tonnage _____

Net do. do. _____

Exact present draft of water to inches _____

Deep load do. do. _____

Ballast do. do. _____

Extreme length of vessel over all including Bowsprit if any _____

Do. breadth do. do. do. _____

Has not* Steam Appliances for Warping, &c.

Has not* engaged a Steam Tug.

I hereby certify that the above information is correct.

BOMBAY HARBOUR, }
_____ 1879. }

Master of the

S.S. _____

* These negatives may be erased if necessary.

(APPENDIX B.)

PRINCE'S DOCK OFFICE,

Permit.

Bombay, _____ 188 .

The S. S. _____ will be received into
Dock at about _____ M. on the
_____ 188 , and should be
brought into the Dock Channel under the directions of _____
not later than _____ M., and will be placed along-
side the _____ Quay or Wharf at No. _____
berth.

Dock Master

TO THE COMMANDER OF THE S.S. _____

BOMBAY PORT TRUST.

RULES FOR THE TRANSPORT AND STORAGE OF MERCHANTS' GUNPOWDER AND OTHER EXPLOSIVES.

Rules made by His Excellency the Right Honourable the Governor of Bombay in Council under Act XII. of 1875.

(Notification No. 28 published for general information in *Government Gazette*, dated 24th June, 1880.)

1. No vessel having gunpowder or other explosives in excess of 100 lbs weight on board shall come nearer to the shipping or to the Town of Bombay than one mile eastward of the Middle Ground Battery until the excess quantity has been discharged and deposited in the Magazine at Siwri, and no vessel shall take on board such excess quantity within the above local limit.

2. As a general rule, in landing and depositing or taking on board such excess quantity, no combustible stores shall be conveyed in the same hoy with powder and ammunition. In special cases, however, where combustible stores of an exceptionally safe description are forwarded with proper precaution as to their stowage and security, this restriction may be omitted.

3. When receiving or delivering such gunpowder, ammunition, &c., the master of any vessel is to see that the platform in the vessel's hold, the gangways and combings of the hatchways are covered with tanned hides, or other suitable paddings, and that the barrels or boxes are carefully stowed, the hatches properly secured and locked, and that the key remains in his own possession.

4. A cushion (stuffed with white oakum) covered with leather is to be used for landing all such powder barrels or cases upon, whether in the hold of the vessel or on the wharf, when loading or discharging powder.

5. In stowing such powder in the hold of the vessel, the barrels are to be carried, and on no account to be rolled over each other, unless tanned hides are laid down for the purpose of protection.

6. After the vessel has been discharged, the hides, hair cloths, &c., are to be removed, and the hold carefully cleaned out.

7. When such gunpowder or ammunition is being shipped on board, or being discharged from any vessel within the limits of the port, neither fires, lights, nor smoking are under any circumstances to be permitted on board. Such shipment or discharge is only to be permitted between sunrise and an hour before sunset, and a red flag is to be displayed during shipment or discharge, from the highest foremasthead.

8. Every such vessel as last aforesaid when at anchor at night in the roadstead or in the track of shipping is to show a masthead light, and every such vessel when under weigh at night is to show side lights, according to the Admiralty Regulations.

9. Barges, lighters, and vessels carrying such gunpowder or other

explosives shall not when at anchor lie closer to Bombay than one mile from the Middle Ground Battery nor within half a mile of any of the shipping.

10. When any vessel has such gunpowder, ammunition, or combustible stores on board, a red flag is to be hoisted at the masthead and kept flying until the cargo is discharged. The master and all the crew are to remain on board until the explosive stores are discharged, unless it be necessary to procure water or provisions, in which case notice is to be given to the control officer, but the vessel is not to be left without either the master or a petty officer on board.

11. Smoking and carrying lucifer matches on board lighters for conveying such gunpowder are strictly prohibited.

12. No fire is to be allowed in the vessels, barges, or boats having on board or receiving such gunpowder.

13. Vessels, barges, and boats having or taking on board such gunpowder are to be kept scrupulously clean, and free from loose gunpowder.

14. In shipping or unshipping such ammunition or gunpowder, tanned hides or wadmiltits are to be laid over that portion of the vessel over which the cases or barrels pass.

15. All boats laden with such gunpowder or other explosives are to remain at anchor one mile eastward of the Middle Ground Battery, or, in bad weather, half a mile eastward of the shipping off Cross Island, until orders are received to land it.

16. Only deck-boats with closed-in hatches under lock and key (the latter to remain in the charge of the Police or other official superintending the discharge of the gunpowder or ammunition) are to be used for the conveyance of such gunpowder or other explosives, and they are to have the word "explosives" in white letters a foot long painted on a black ground on each side above the water line, and a red flag is to be kept hoisted during the time any such ammunition, gunpowder, or explosives is or are on board.

17. The consignee, agent, or other persons concerned shall give written notice (forty-eight hours before the expected arrival of any such gunpowder or other explosives) to the Port Officer, and to the Superintendent, Water Police, and the latter shall depute a special officer to remain in charge of such gunpowder or other explosive until the same has been deposited in the Magazine.

18. No percussion caps, fuzcs, or other priming by which gunpowder or other explosives may be exploded, shall be carried in a boat having such gunpowder or other explosives on board.

19. Every person committing a breach of any of the above rules will be liable to fine under the provisions of Section 42 of Act XII. of 1875.

By order of His Excellency the Right
Honourable the Governor in Council,

M. W. WILLOUGHBY, Colonel,
Acting Secretary to Government.

Bye-laws made by the Trustees of the Port of Bombay, under Section 73 of Bombay Act VI. of 1879, for the safe and convenient use of the Magazine at Siwri for the storage of Gunpowder and other Explosives.

1. The premises on which gunpowder is stored are to be watched by a special officer and guard by day and night.
2. The control officer in charge is occasionally to inspect the watchmen to see that they are on the alert and doing their duty.
3. The watchmen are not to permit any persons but such as are employed in the service of the department to enter the magazine or enclosures. All the outer gates are to be kept shut, and no labourer or other person is to be allowed to pass during the working hours without leave from the control officer in charge.
4. The watchmen are not to allow any smoking or fire near the magazine, nor to suffer any person to come within the outer gates who has the least appearance of intoxication. They are immediately to secure any one guilty of any of these offences, and report the circumstances to the control officer in charge.
5. Any person in the employ of the department who may be detected smoking on any part of the gunpowder magazine, or bringing lucifer matches into the premises, will be immediately dismissed and prosecuted according to law.
6. The control officer in charge is not to absent himself for a night from the Magazine without authority.
7. The control officer is to superintend all operations which are being carried on by the labourers and others under his orders, and to see that all the duties are properly conducted.
8. On no occasion are strangers to have access to the Magazine without the attendance of the control officer, who shall take care that all persons entering have attended to the necessary precautions, and that they have no articles of a combustible nature in their possession.
9. The control officer is to keep a regular daily entry of all receipts and issues, and make the necessary alterations in the tally-boards attached to the bags in the Magazine.
10. The several persons whose duty obliges them to go into the Magazine shall invariably exchange their shoes for Magazine slippers before they enter, or else enter without shoes. Care will be taken to provide a sufficient supply of either over-boots, goloshes or slippers of suitable sizes fitted with straps and brass buckles to fasten over the instep, so as to prevent sliding or shuffling along the floors or platforms.
11. When there is an outer wall to the Magazine, the door in it, on any person entering, is to be shut before that of the Magazine is opened; and the inner door of the Magazine is to be shut before the outer one is opened on his going out.
12. The floors of the Magazine, shifting room, and passages, when not of wood, are to be covered with tarpaulins prior to removal of powder. Wooden floors are to be carefully swept before every such removal, and floors other than wood are also to be well swept, and kept

free from all gravel, sand, or grit, and previous to the removal of powder the rolling ways and stages are to be carefully watered.

II.—PRECAUTIONS AGAINST FIRE.

13. The watchmen are to be particularly attentive to the least appearance of a storm, and on hearing the first clap of thunder or seeing a flash of lightning, though the storm may be at a great distance, are immediately to give an alarm to the control officer, or magazine-keeper, as the case may be, who is immediately to cause all the magazine doors and windows to be shut, and to use every precaution necessary for the safety of the Magazine.

14. When such alarm has been given, every person in the employ of the department, whether on or off duty, is immediately to repair to the office to render such services as may be required of him by the control officer in charge.

15. The same precautions are to be adopted in the event of any fire breaking out in the neighbourhood of the Magazine.

16. The fire engines, engine hose, ladders, fire hooks, &c., are to be kept in perfect repair, and so lodged that they may at all times be ready and fit for use. The engines are to be worked twice a week, to ensure that they are in working order and that the water-supply is sufficient.

17. The person in charge of the Magazine is to know perfectly the arrangement and whereabouts of each article, so as to be able to find it at once in the darkest night.

18. The control officer in charge shall take care that the cisterns are kept constantly full of water, for the security of the Magazine, and that the several pumps and lightning conductors are kept in proper repair, and the wells full. He shall report to his immediate superior every week on the condition of the fire engine, water-supply and other appliances, and should any of these things become defective a requisition is immediately to be made on the department for the repairs to be performed.

III.—CARE AND STORAGE OF GUNPOWDER.

19. The control officer shall keep three separate Registers of Receipts and Issues as follows:—

- A.—For gunpowder, &c., landed at the Magazine for custody pending importation and clearance through the Custom House on payment of duty.
- B.—For gunpowder, &c., landed from vessels for temporary deposit, during their stay in harbour, to be taken on board again when they sail.
- C.—For gunpowder, &c., on which customs duty has been paid, lodged for care pending removal at the convenience of the owners.

20. On the arrival of any powder for storage, if it be from a ship in harbour under class A or B, the control officer shall first check the packages by their marks and numbers with the boat notes, and countersign the latter in acknowledgment of receipt, or endorse upon them a note of any discrepancies he may observe, for the information of the Customs Department.

21. He shall then enter it in the proper Register,—A, B, or C, as

the case may be,—and furnish the depositor with a receipt in corresponding form.

22. In storing the powder he shall be careful to see that each lot is kept together according to its marks and numbers, and separate from other lots as far as practicable.

23. Powder, &c., coming under class A or B on which duty has not been paid, shall invariably be stored in a separate room to be set apart for its reception, and shall be held at the disposal of the Customs Department, pending production of a written permission to re-ship in the case of powder coming under class B, or of an import entry and no demand certificate under the signature of the Collector of Customs in the case of powder coming under class A.

24. The no-demand certificate shall be endorsed upon the Magazine receipt, and no powder shall be allowed to leave the Magazine unless the receipt has been produced and the control officer has satisfied himself that the certificate, if required, has been endorsed upon it.

25. On production of the import entry and no-demand certificate as above, for powder stored under class A, the powder shall be written off Register A, and, unless it is to be passed out at once, shall be entered in Register C, and removed and stored in the duty-paid powder room.

26. No powder shall be passed out of the Magazine without production of a transport license or other proper authorization from the Commissioner of Police.

27. Every barrel, box, or case shall be carefully examined, in order to discover whether it be perfectly closed, so that no powder can escape, and whether any of the hoops be fastened with iron nails, or there be any iron or any thing objectionable on any part of the barrel, &c. Should any barrel, box, or case be discovered so circumstanced, it shall not be received into the Magazine, but the powder shall be immediately shifted into another barrel or case, and a report made to the controller. These precautions must never be dispensed with, as fatal accidents have happened from their being neglected. A record of the examination will be made on every arrival of powder.

28. No barrel, box, or case shall on any account be opened in the Magazine, but, when required, shall be taken to the shifting room, which must always be kept ready for that purpose.

29. No barrels containing powder or ammunition are to be suffered to lie open in the Magazine, and no powder is to be shifted from one bag to another, or otherwise, without a sufficient number of tanned hides or wadmiltits being placed under the barrels, in order to keep the powder as much as possible from the floor; any loose powder is to be carefully swept up, and not suffered to remain. Care must also be taken that all powder barrels are properly and securely stacked in the several bags; and in case any of the heads of the barrels start, they are immediately to be removed, and the powder shifted into serviceable barrels.

30. In the event of the issue of a less quantity than a whole barrel, the package containing it is to be marked like the barrel

from which it is taken. In the journal of issue, the marks, dates, &c., are to be noted as a matter of record.

31. In stacking barrels or cases of powder and ammunition, a space is to be left between them and the wall of the Magazine, to allow of a free circulation of air and prevent injury from damp.

32. No stores whatever are to be placed in the same compartment of the magazine with powder in barrels. Ammunition for breech-loading small arms, especially which contains its own means of ignition, must not be stowed within the same masonry compartments of the Magazine as gunpowder.

33. The control officer is accordingly to take the necessary steps for placing ammunition of this class in separate masonry compartments.

34. The powder which has been longest in store of every consignee is as a rule to be issued first, except by special order to the contrary.

35. Upon no account whatever are friction tubes, percussion fuzes, or fuzes of any kind that contain their own means of ignition within themselves, to be placed inside the Magazine.

IV.—COOPERAGE.

36. All tools, instruments, or other articles used in the Magazine are to be made of wood, copper, or bronze, and nothing containing iron or liable to cause ignition is to be admitted.

37. The use of iron rivets to copper hoops of the description used for powder barrels, whether loose or otherwise, is forbidden in the Magazine, even if those hoops should be intended to be applied in the first instance to barrels not containing powder, as they are liable to be afterwards transferred to such as may contain it.

38. In heading and unheading powder barrels, the persons employed are never to use the bare adze against the copper hoops, but are invariably to apply a wooden-handled metal setter.

39. Whenever it may be necessary to shift gunpowder from one barrel to another, the barrel intended to receive such powder shall first have all the marks except the tare on it carefully obliterated, and shall then be re-marked with precisely the same marks as the barrel from whence the powder is transferred, with the exception of the tare marks.

40. Nails are on no account to be used to fasten on the hoops in re-heading powder barrels.

41. When large quantities are delivered, the control officer making the issue is to take care that the contractor by whom the packages are received provides proper conveyance for the same, that the carts or wagons are not overladen, and that they are properly secured.

42. Any person infringing the above bye-laws will be liable to a penalty, for each infringement, not exceeding one hundred rupees.

MARINE DEPARTMENT,

BOMBAY CASTLE, 14th June, 1880.

No. 26.—Under Section 43 of the Bombay Port Trust Act, 1879, the following scale of rates, framed by the Trustees of the Port for the

wharfage, landing and storage of gunpowder at the Trustees' Magazine at Siwri, and sanctioned by Government, is published for general information :—

	Wharfage.	Landing, storing, & delivering.*	Rent for 6 months or part of 6 months.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Case or Barrel up to 25 lbs.	0 2 0	0 1 6	0 6 0
Do. above 25 lbs. up to 50 lbs.	0 3 0	0 2 0	0 12 0
Do. above 50 lbs. up to 100 lbs.	0 4 0	0 3 0	1 0 0
For every 25 lbs. additional	0 2 0	0 1 6	0 6 0
Percussion caps and loaded cartridges per cubic foot	0 2 0	0 1 6	0 6 0

When gunpowder or other explosives are removed from one part of Siwri Magazine to another at the request of the owner half of the landing, storing, and delivery charges will be levied.

By order,
(Sd.) J. M. MACDONALD, Colonel,
Secretary to Government.

* Does not include any charge for boat hire.
Charge for loading and unloading carts 1 anna per cart.



BOMBAY PORT TRUST.

PILOTAGE RULES

MARINE DEPARTMENT,

BOMBAY CASTLE, 11th February, 1880.

No. 7.—Under section 74 of the Bombay Port Trust Act, 1879, the following bye-laws made by the Trustees of the Port of Bombay under section 72 of the said Act are published for general information :—

PREFATORY NOTES.

1. The direction and management of the Port, Pilotage and Docks under the control of the Trustees of the Port are vested in the Port Officer.

2. The First Assistant shall be the Deputy to the Port Officer for the performance of all the duties appertaining to his office in regard to the Port and Pilotage Departments.

3. There shall be also a Dock Master, who shall be under the control of the Port Officer, and shall have the rank of Second Assistant Port Officer.

4. Three Master Pilots shall be appointed to be also Harbour Masters, whose duties shall be to carry out the details of the duties belonging to the Port Officer and his Assistants under the orders of those officers.

They shall be stationed as follows :—

One at the Port Office, which shall be styled No. 1 Station.

One at the Prince's Dock, to be styled No. 2 Station.

One in charge of the Pilot Schooner to be styled No. 3, or the Outer Station.

BYE-LAWS MADE BY THE TRUSTEES OF THE PORT OF BOMBAY UNDER SECTION 72 OF THE BOMBAY PORT TRUST ACT, 1879.

REGARDING THE DUTIES OF MASTER PILOTS OR HARBOUR MASTERS.

1. *At No. 1 Station.*—He shall see that all vessels are properly berthed and moored in the Harbour, and Transport such vessels as may be ordered. He shall have the care and inspection of the Light Ships, the Anchor Hoy and all other vessels, boats and the buoys of the department, and perform the surveying and measuring duties. In the event of fire he shall attend at the spot thereof with all unemployed Pilots, who are to place themselves under his orders, to render assistance ; and under the Port Officer shall have charge of the general conservancy of the Harbour.

2. *At No. 2 Station.*—He will, under the orders of the Dock Master, have the control of the positions in which vessels are to be anchored off the Dock Channel and over the approaches to the Dock. He will conduct and direct vessels from the Harbour

through the channel to and from the Docks, and assist in Docking and Undocking vessels, and superintend placing them in their allotted berths. He will superintend all the arrangements, and also prepare and provide all wraps, ropes, fenders, tugs, boats and other appliances in readiness for Docking and Undocking vessels.

3. *At the Outer or No. 3 Station.*—He shall have charge of the Schooner and the control of the Tender Vessel and Pilots at the Outer Station; and be responsible and use his utmost endeavours to supply Pilots to in-bound and to receive Pilots from out-bound vessels. He will keep such complement of Pilots on board the Schooner as may be ordered from time to time, and arrange for the return to the harbour of others not required. He will remain on his station for such periods as may be ordered, leaving it (unless under exceptional circumstances) only when relieved by another Harbour Master in the Fair Season, or during the S. W. Monsoon when relieved by another vessel.

4. Each Harbour Master will keep a Journal or Diary of his daily employment, which shall be submitted for the inspection of the Port Officer on each occasion of the Harbour Master taking up the duties at No. 1 Station, or whenever called for.

5. The Harbour Masters shall undertake the duties at each of the Stations in rotation for such periods as may from time to time be ordered by the Port Officer.

REGARDING PILOT VESSELS.

6. The Trustees shall provide and maintain such Schooners and other vessels, for conveying Pilots to and from inward and outward bound vessels, as they may from time to time consider to be necessary.

7. Such crews as the Trustees consider to be necessary for the working of the Pilot vessels shall be provided by and at the expense of the Trustees.

8. The Pilot Schooner, which shall be painted a black colour outside, except a ribbon or band 2 inches wide close above the covering board, and the number in large figures on each bow, which shall be painted white, shall cruise between the Outer Floating Light Ship bearing S. E. 2 miles and the Island of Kundaree bearing S. E. 5 miles, and the position between these bearings shall be known as the Outer Station.

9. A Log or Journal, supervised and countersigned daily by the Harbour Master in charge, shall be kept on Board each Pilot Schooner when working; the following entries are to be carefully made therein every four hours when at the Outer Station, and shall be verified by the signature of each Pilot at the end of his watch, viz:—

The state of the Weather.

The direction and force of the Wind and Currents.

The readings of the Barometer and Thermometer.

The bearings and estimated distance of the Outer Light Ship.

The depth of water the Schooner is in, and whether she is under weigh or at anchor.

The time of sighting a vessel and the bearing; when and where the Pilot was placed on board.

The time and position when a Pilot leaves an out-bound vessel, and when received on board.

The time of receiving on board Pilots from the Inner Station, or

the despatch of excess Pilots to the shore, and all signals to shipping or signal station.

This Log shall be forwarded to the Port Officer for inspection immediately after each cruise in the S. W. Monsoon, and at such intervals during the Fair Season as may be ordered.

10. When the Schooner at the Outer Station shall fail to supply an inward-bound vessel with a Pilot outside the limits of the Port, and such inward-bound vessel shall be supplied from the shore or elsewhere before reaching the Sunk Rock Inner Light, then the Pilots shall only receive (for division into shares) one-half of the sum they would have been entitled to had such vessel been piloted in from beyond Port limits.

11. When an inward-bound vessel shall not be supplied with a Pilot until inside the Sunk Rock Light, only one-third of the money they would have been entitled to had the vessel been boarded outside Port Limits shall be given to the Pilots.

12. Should the Schooner be within moderate distance of an inward-bound vessel and offer a Pilot, then the Pilots shall receive the same share as they would have received had a Pilot been put on board in that position.

REGARDING THE PILOT SERVICE.

13. The Pilot Service shall consist of 15 Licensed Pilots, viz:—

- 5 First Grade Pilots.
- 5 Second do. do.
- 5 Third do. do.

14. All Pilots shall hold licenses to perform the duties of a Pilot for the Port of Bombay for the grade they may be serving in, which shall be issued under the signature and seal and be revocable at the order of the Trustees of the Port.

15. The fee for a Pilot license on first appointment shall be Rs. 15, and for the renewal thereof in case of loss, or promotion to a higher grade, shall be Rs. 5.

16. No license shall be renewed, nor another issued to any Pilot until after the former one has been returned and cancelled, or its loss has been satisfactorily explained.

17. Promotion to the various grades will generally be given by seniority, but the Trustees reserve to themselves the right of passing over any Pilot.

18. During the absence from any cause for more than one month of one or more Pilots on the permanent list, the Trustees may appoint a like number of Probationers who shall have passed the examination prescribed by bye-law 22 to be Acting Pilots. So long as such Probationers shall remain Acting Pilots they shall receive the pay of the class of the Pilots in which they may be acting, and shall otherwise be amenable to the rules laid down for observance by Pilots.

REGARDING PROBATIONERS FOR THE PILOT SERVICE.

19. Such number of Probationers, not exceeding four, may be entertained as may from time to time be considered necessary.

20 To be eligible for admission to the Pilot Service, Candidates must be British subjects, and at least 21 years of age. They

must hold certificates of good conduct, character and ability, and must undergo an examination by and produce a certificate from the Medical Officer appointed by the Trustees that they are physically fit and are of a sufficiently hardy or strong constitution to perform a Pilot's duty, and that they to all appearance enjoy good health.

21. The Port Officer shall have the appointment of Probationers, subject to the approval of the Trustees.

22. Any Probationer may, with the sanction of the Port Officer, go before the Examining Committee, and if he passes he will be eligible for appointment as a Third Grade Pilot when a vacancy occurs.

23. A Probationer not passing the required examination to qualify for performing a Pilot's duties within 6 months after the date of his appointment shall be liable to be struck off the list.

REGARDING THE EXAMINATION BOARD.

24. The Examiners of Pilots shall be—

The Port Officer or one of his Assistants.

One Harbour Master.

One First or Second Grade Pilot.

Lloyd's Marine Surveyor (who shall receive a fee of One Gold Mohur for each Pilot examined).

GENERAL RULES FOR THE GUIDANCE OF PILOTS.

25. As all the various duties connected with the Department cannot be completely detailed in these Regulations, it is hereby directed that every verbal order or instruction given by the Port Officer and the Officers of his Department be promptly attended to and carried into effect by the Pilots, who will be careful to conform to and to make themselves acquainted with all Circulars and Orders issued from time to time for guidance in connection with their duties.

26. No Pilots shall absent himself from his station or from his duty without permission, except in case of sickness which shall be reported without delay, accompanied by a certificate from a qualified Medical Officer approved by the Trustees.

27. An officer will be appointed by the Trustees to afford medical aid to Harbour Masters, Pilots, and Probationers free of charge.

28. When Pilots are on board the Schooners they shall be under the authority of the Harbour Master in charge, and they must pay strict attention to any lawful order he may give, whether as to taking their turn at working the Schooner at which they must assist or as to boarding vessels.

29. Pilots returning from the performance of any duty will, if between the hours of 10 A.M. and 5 P.M., report themselves personally to the Assistant Port Officer, and enter their names and the time of landing in a Book kept for that purpose; all unemployed Pilots will attend at the Office from 10 to 11 A.M. and from 4 to 5 P.M. daily for any orders.

30. Pilots shall conduct themselves on all occasions in an orderly and civil manner; when in charge of vessels they should meet the wishes of Commanders when the safety of the vessel is not involved

thereby, or will not lead to inconvenience, nor to the infringement of orders received from the Department.

31. When on duty Pilots shall wear a uniform dress, consisting of a round double-breasted white or blue cloth or serge coat, to button if required close up to the throat, by two rows of Bombay Port Trust pattern buttons of four in each row ; with blue cloth or serge or white trousers. If a cap be worn, it shall be of the round crown Navy pattern, with drooping peak surrounded by a mohair band and the Bombay Port Trust badge in front.

32. Pilots should invariably appear respectably and neatly dressed.

33. Each Pilot shall provide himself, have with him, and produce when necessary or demanded, an efficient Watch and pair of Binoculars ; also his License, a Tide Table, the Port Pilotage and the Wet Dock Regulations.

34. It is the duty of Pilots to take Steamers to sea from clear berths, or to bring them into Harbour on ordinary nights when the lights are visible, and reasonably distant objects discernible ; but they shall on no account run unnecessary risks by venturing within the leading marks, or keeping vessels underweigh when the lights cannot be seen, and whilst underweigh the lead shall be kept going, and the soundings be carefully observed. And all signals made at Signal Stations on shore, at Light Vessels and on board the Pilot Schooners are to be observed and attended to.

35. Immediately after any vessel may have caused or sustained damage, touched the ground or got on shore while in their charge, pilots shall furnish a clear and explicit report of the same to the Port Officer ; such report should state the cause, in the Pilot's opinion, of such accident, damage or grounding ; time of occurrence thereof, bearings of known objects ; means used to get the vessel afloat, or clear ; state of wind, weather and tide ; length of time the vessel lay on the ground or in collision, and nature of the ground ; such report should be submitted to the Commander or Officer in charge for his remarks and counter-signature, or his refusal to do so should be noted thereon by the Pilot ; unless prevented by circumstances the Pilot will present the report personally, and he shall not after an accident has occurred and damage been caused or sustained take the vessel to sea (Mail Steamers excepted) until ordered to do so by the Port Officer.

36. It will be the duty of Pilots to see that the Arrival or Departure Report is duly and correctly filled up before he leaves a vessel, and that it is forwarded without delay. On arrival report containing intelligence of exceptional importance, and the arrival reports of Mail Steamers or vessels with passengers of considerable official or of high rank, or vessels with dangerous cargo on board, should be forwarded direct to the Port Officer ; in all other cases the report should be left at the Office.

37. Departure Reports are on no account to be detained on board the Schooner at the Outer Station (where they are immediately on arrival to be handed to the Harbour Master in charge), but are to be sent in to the Office by the first opportunity.

38. In cases of fire or other accidents afloat, the Pilots off duty shall immediately attend at the Port Office to receive orders.

39. Whenever any of the Harbour, Shoal or Mooring Buoys are missing, injured or out of their proper places ; or if any vessel is placed improperly as to her draught of water, or too near the moorings of other vessels or shoals ; or if it comes to the knowledge of any Pilot that any of the Port Rules are being or have been infringed ; or in the event of any circumstance out of the ordinary course, or any casualty occurring on board vessels whilst they may be in Pilotage charge, or have a Pilot on board, the same should be reported to the Port Officer without delay.

40. When passing any Vessel of War, it is the Pilot's duty to request the Master to dip the colours ; and on the approach of any Man-of-war or other Government Boat to board to "heave the vessel to," or to cause the speed thereof to be sufficiently checked (when it can be done with safety) to enable the boat to get alongside without loss of time.

41. Pilots are forbidden to receive any gratification from Masters of vessels or others with whom they are brought in contact in the execution of their duty ; any gratuity given to a Pilot will, if brought to the notice of the Trustees of the Port, lead to his instant dismissal.

42. Pilots shall not hold any interest in steam tugs, nor shall they be allowed to keep a Tavern or Lodging House, or in any way to retail Wines or Spirits.

43. No Pilot shall claim salvage without the consent of the Trustees.

REGARDING ANCHORING AND MOORING.

44. The practice of making a running moor must never be resorted to when it can possibly be avoided.

45. All vessels shall be moored as a general rule South-South-West and North-North-East, between the 15th of September and the 15th of May there shall be 45 fathoms of cable to the hawse each way ; between the 15th of May and the 15th of September there shall be 60 fathoms of cable on the flood or South-West anchor, and 45 fathoms on the ebb or North-East anchor to the hawse ; and all vessels shall be berthed in a sufficient depth of water to enable them to load to their deepest draught without touching the ground, and in a position where they will swing clear of all other vessels, fixed moorings, shoals, and buoys.

46. Vessels which are intended and are ready on arrival to be placed in Wet Dock, but which cannot enter the Dock until the next flood-tide, will be placed at single anchor off the Dock channel, or as near thereto as their draught of water will admit ; and will, if necessary, after receipt of an order from an Officer of the Department, be left by the Pilot in charge of the Commander ; but in no other case shall a Pilot quit an in-bound vessel after once taking charge until after it has been received into Dock or is properly berthed in the harbour.

47. Vessels intended to be placed in Wet Dock, but which on arrival are of heavier draught than the depth of water at the Dock Entrance will admit, or from other circumstances may not be able to enter the Dock within 24 hours, shall be moored or placed at single anchor in the harbour as may be ordered.

48. Vessels arriving with or taking in Gunpowder shall be anchored

not nearer than one mile South-East from the Middle Ground Battery, or in stormy unsettled weather not nearer than one mile from the Easternmost shipping and Cross Island not bearing to the Westward or North-West.

49. Vessels arriving with or taking in Dynamite, Nitro-glycerine or other explosives shall, in the absence of special orders, be anchored not nearer than one and a half miles South-Eastward of the Sunk Rock Light.

50. Vessels remaining below the Middle Ground over 24 hours shall be moored unless the Commander signifies in writing his readiness to take charge of the vessel at single anchor.

REGARDING UNMOORING AND TRANSPORTING.

51. The transporting duties will, when practicable, be performed by the Harbour Masters, but any excess will be conducted by the Pilots in rotation for duty.

52. In unmooring vessels it will be the duty of the Pilot to see and personally assure himself that one anchor is clear for being let go; that the cable is ranged, bitted, and clear for running, and on a "non-self-flecting windlass," that the chain is flected close over when the anchor is "short a peak" (so as to bring it well up clear of the ground) before weighing the last anchor.

53. On no account shall any vessel be moved to another part of the harbour without there being a sufficient number of seamen on board (European or Native) to perform any duty which may be required, and no vessel should be moved underweigh unless the Master thereof is on board.

REGARDING OUTWARD PILOTAGE.

54. On taking charge of an out-ward bound vessel, the Pilot should not get the vessel underweigh unless the Commander is on board; in the event of his doing so, the Pilot will be held personally responsible for any or all accidents that may occur from any cause. He will see that the vessel's National Ensign is kept hoisted between sunrise and sunset, or until the vessel is beyond the harbour limits. He shall see that the lead line is correctly marked, and that the steering gear is in good order; he shall also ascertain the draught of water and freeboard, the time, bearing and estimated distance of the Outer Light Vessel on his leaving the vessel, and shall enter the same in the Departure Report.

55. In working out of the harbour during the South-West Monsoon, or whenever the vessel has a head wind, the Pilot must be careful not to leave the vessel in his charge until she is well clear of all danger, and every endeavour should be made to leave outward-bound vessels when within the limits of the Outer Station.

56. Unless under circumstances of unavoidable necessity, no Pilot shall without his consent be taken to sea beyond the limits of the Port

or of the Outer Station in any vessel whatever ; and every Pilot so taken under circumstances of unavoidable necessity or without his consent, is entitled over and above his share of the Pilotage fees to receive from the ship as follows :—

If a 1st Grade Pilot,	Rs. 12 per diem.
If a 2nd Grade „	„ 10 „
If a 3rd Grade „	„ 8 „

in addition to board and lodging to be computed from and inclusive of the day on which the ship passes the limits of the Port up to and inclusive of the day of his being returned in the said ship to within the limits of the Port, or up to and inclusive of such day as will allow him if discharged from the ship sufficient time to return thereto ; and in this last case he is entitled to his reasonable travelling expenses.

57. When an outward-bound vessel anchors below the Middle Ground in the South-West Monsoon, or during unsettled weather, the Pilot shall not quit the vessel (unless specially ordered to do so) if she is going to sea on the next day.

REGARDING INWARD PILOTAGE.

58. Before boarding a vessel the Pilot will ascertain whether there is any epidemic disease on board. If there is, and the epidemic be of a severe nature, such as Plague, Yellow Fever, or a number of cases of Cholera, Small-pox or Measles, he will direct the vessel to be anchored at the Quarantine anchorage, and to hoist the Quarantine flag ; but in the latter three diseases, if there is or only has been one or two cases during the voyage, he will board and (after obtaining a certificate from the Commander to that effect) berth the vessel in the harbour, hoisting the letter R flag, the signal for the Health Officer of the Port to inspect.

59. In the event of the Pilot having boarded a vessel which requires to be placed in quarantine, he will remain on board till the vessel obtains Pratique.

60. The Pilot will on boarding note the time, the bearing and estimated distance from the Outer Light Vessel, entering the same in the Arrival Report. He will also ascertain the vessel's present and deep load draught of water entering the same in the Arrival Report, see that the anchors are clear, and cable ranged to the required length ; that the National Ensign is hoisted in its proper place, and the flags denoting the name of the vessel in the Commercial Code (and the Port from which she sailed if demanded), and will take care that the flags are placed in such a manner as to be clearly seen from the Outer Signal Station.

61. When there are despatches on board for Government, or Post Office Packets, the Pilot will request the Commander to send such on shore with as little delay as possible.

62. Harbour Masters and Pilots will be provided with a distinguish-

ing flag, which is to be displayed, hoisted under the national flags of vessels of which they are in charge.

The same flag hoisted under the Pilot Jack at any of the signal stations or at the Prince's Dock, will be used in communicating with the vessel.

The flags and pennants of the International Code will be used for this purpose :—

Harbour Masters.....	{ 1—Flag B. 2—Pennant—C. 3—Do. —D.
1st Grade Pilots:	{ 1—Pennant—F. 2—Do. —G. 3—Flag—H. 4—Do. —I. 5—Do. —K.
2nd Grade Pilots.....	{ 1—Flag—L. 2—Do. —M. 3—Do. —N. 4—Do. —P. 5—Do. —Q.
3rd Grade Pilots	{ 1—Flag—R. 2—Do. —S. 3—Do. —T. 4—Do. —V. 5—Do. —W.

On Pilots boarding vessels requiring to be taken into the Prince's Dock (as soon as the Vessel's number has been repeated or replied to at the Outer Signal Station) the signal C. S. R. M. and the vessel's draught of water is to be hoisted, which will be telegraphed from the signal and Port stations, and arrangements will be made to take the vessel into Dock if the tide serves; if not the rendezvous flag will be displayed under the Pilot's distinguishing flag at the Dock Flag Staff and the vessel is to Anchor off the Channel.

II.—REGARDING PAY.

63. The gross receipts for Pilotage shall be divided as follows :—

One-half to be distributed amongst the Harbour Masters and Pilots according to the following scale :—

- (a) 2 per cent. on the gross amount of "Inward" Pilotage fees of vessels supplied with Pilots by the Outer Station Schooner shall be paid to the Harbour Master according to the time that he may have been in command, *e. a.*, if one had command for 8 days, another for 10 days, and the 3rd for 12 days in a month of 30 days, they would be paid $\frac{8}{30}$ ths, $\frac{10}{30}$ ths, and $\frac{12}{30}$ ths respectively of 2 per cent. of the "Inward" Pilotage fees of vessels supplied with Pilots from the Outer Station Schooner for that month.
- (b) In the event of a Pilot being unable for any reason to take a vessel into Dock after arriving off the Channel, and if a

By 5 Third Grade Pilots from vessels on which Pilotage amounted Rs. 3,200 in the following proportions :—

Pilot K	...	...	...	...	...	...	...	Rs. 800
" L	...	...	...	...	...	...	...	" 600
" M	...	...	...	...	...	...	...	" 500
" N	...	...	...	...	...	...	...	" 700
" O	...	...	...	...	...	...	...	" 600
								<u>3,200</u>
								Rs. 10,000

The amount divisible amongst the whole of the Pilots would, under rule 67, be 50 per cent. of the gross earnings, which is Rs. 5,000, which would be divided as follows :—

2 per cent. of gross Inward Pilotage to Harbour			
Masters	...	Rs.	100 0 0
$\frac{1}{3}$ ths of balance, e. g. Rs. 5,000—Rs. 100=Rs. 4,900			
to 5 First Grade Pilots	...	Rs.	1,960 0 0
$\frac{1}{3}$ ths do. do. 5 Second Grade do...	...	"	1,633 5 4
$\frac{1}{3}$ ths do. do. 5 Third Grade do	...	"	1,506 10 8
		Rs.	<u>5,000 0 0</u>

The $\frac{1}{3}$ ths shares accruing to the First Grade Pilots would be divisible according to the following proportions :—

If their gross earnings, Rs. 3,500, give net earnings amounting to Rs. 1,960, what will A's share of gross earnings, i.e. Rs. 800 give ?
Ans.

			Rs.	Rs. 448
B's	do.	do.	900	" 504
C's	do.	do.	600	" 336
D's	do.	do.	500	" 280
E's	do.	do.	700	" 302
			<u>Rs. 3,500</u>	<u>Rs. 1,960</u>

According to the same method of calculation, the $\frac{1}{3}$ ths shares divisible amongst the 2nd Grade Pilots would give—

Pilot F	on his Rs. 700	of earnings Rs. 346 7 6
" G	" " 600	" " 296 15 6
" H	" " 500	" " 247 7 7
" I	" " 600	" " 296 15 6
" J	" " 900	" " 445 7 3
		<u>Rs. 3,300</u>
		Rs. 1,633 5 4

And the $\frac{1}{3}$ ths shares divisible amongst 3rd Grade Pilots would give to—

Pilot K	on his Rs. 800	of earnings Rs. 326 10 8
" L	" " 600	" " 245 0 0
" M	" " 500	" " 204 2 8
" N	" " 700	" " 285 13 4
" O	" " 600	" " 245 0 0
		<u>Rs. 3,200</u>
		Rs. 1,306 10 8

But these sums would, as has already been stated, be subject to the deduction of transporting fees and leave allowances payable under Clauses *b*, *c* and *d* of Rule 68.

The remainder of the Pilotage earnings to accrue to the Trustees for their expenses in connection with the Pilot Service.

In the event of there being one or more vacancies in any grade or grades, the average share of the earnings accruing on account of such vacancy or vacancies should be added to the sum divisible amongst the running pilots in the proportion that their pay bears to each other in bye-law No. 85.

65. Any personal servants required by Harbour Masters or Pilots on board Schooners or other vessels employed in the conveyance of Pilots shall be provided by the Harbour Masters or Pilots themselves, with the exception of a topaz on board each Schooner, who shall be paid by the Trustees.

66. Any sums retained from the Pilots under bye-laws 10 and 11, also the amount of all Fines and the Fees for Licenses recovered from Pilots shall be credited to the Trustees' share of pilotage earnings.

67. A statement of the Pilotage receipts shall be made up by the Trustees every month, and the amount payable to the Pilots shall be distributed in the month succeeding that during which it shall have been received by the Trustees.

III.—REGARDING LEAVE.

68. Leave of absence can never be claimed absolutely as of right ; it will only be granted when the exigencies of the Service permit.

69. Leave on Medical Certificate may be granted for two years in all, but not for more than one year at one time.

70. A Pilot on leave on Medical Certificate is entitled to the half pay of his substantive grade.

71. Leave on private affairs may be granted without pay for any term not exceeding one year at one time, provided the Pilot or Harbour Master has completed 3 years' service ; such leave may be repeated after intervals of six years, but shall not be cumulative.

72. Leave on Medical Certificate does not count as qualifying for leave on private affairs under the foregoing rule.

73. Privilege leave on full pay of the grade in which a Pilot or Harbour Master holds substantive rank may be granted as follows :— After 11 months' uninterrupted duty, for not more than one month ; after 22 months' uninterrupted duty, for not more than 2 months ; after 33 months' uninterrupted duty, for not more than 3 months, provided that this description of leave shall not be cumulative for more than 3 months.

74. Privilege leave cannot be taken during the monsoon months, i.e., between 1st June and 30th September.

75. Privilege leave may be taken, at the discretion of the Trustees in separate instalments. No second instalment shall be taken until after the completion of six months' continuous duty from the expiry of the previous instalment. In this case the period qualifying for fresh privilege leave will be reckoned from the expiry of the first instalment, the period of the second instalment being omitted from the calculation.

76. If a Harbour Master or Pilot shall over-stay his privilege leave, he shall forfeit all salary during the time of his remaining so absent; and if he so continue absent more than one week in excess of his leave, his office shall become vacant.

77. But the Trustees may exempt a Harbour Master or Pilot from the incidence of the last rule should they consider that his absence has been prolonged beyond his leave by circumstances over which he had no control, and which he could not be expected to foresee.

78. Privilege leave cannot be taken in continuation of sick leave or leave on private affairs, or *vice versa*.

79. On promotion to a higher grade during privilege leave, payment of the higher salary shall be made from the date of promotion, provided that it does not involve any increase or change of duties or responsibilities.

80. Casual leave may be granted at the discretion of the Port Officer for any period not exceeding 10 days at one time, and not exceeding 20 days in any one calendar year; such leave is not admissible in extension of leave of any other description; being unofficial and of a temporary nature, it does not disqualify a Harbour Master or Pilot for other leave, and it carries with it the same pay that he would receive if on privilege leave.

81. Allowance during privilege leave or casual leave shall be payable from the fund from which the pay of the person absent on leave is payable; and in the case of a Pilot such allowance shall be calculated at the proportionate rate of earnings of the grade to which he shall belong.

82. Leave on private affairs cannot be taken in continuation of any other leave; but any leave granted under these Rules may be retrospectively changed for any other kind or amount of leave which might at first have been granted.

83. Leave without pay cannot be converted retrospectively into leave on Medical Certificate; but leave on Medical Certificate may be given in continuation of leave without pay.

84. Absence without leave, or after the end of leave (excepting privilege leave, in which case a week's grace is allowed) involves loss of appointment.

85. For the purposes of the Leave Rules the pay of the several grades of the Pilot Service shall be taken to be as follows :—

Harbour Master.....	Rs. 450	per mensem.
1st Grade Pilot	„ 400	„
2nd „	„ 330	„
3rd „	„ 265	„

By order of H. E. the Hon'ble the Governor in Council,

JOHN A. M. MACDONALD, Colonel,
Secretary to Government.

BOMBAY PORT TRUST

56

BOMBAY PORT TRUST.

RATES TO BE CHARGED AT THE PRINCE'S DOCK.

Sanctioned by the Government of Bombay on the 9th day of March, 1880.

Removal and Delivery Charges should Un-claimed Goods or part of be removed from the Wharf to the Ware-house after the expiry of Free days allowed.	No. of Items.	Description of Goods.	How Charged.	Imports.			Exports.		
				Wharf- age Fee.	Dock and Landing Charges.	Total Charge, Wharf- age and Landing.	Wharf- age Fee.	Dock and Shipping Charges.	Total Charge, Wharf- age and Shipping.
Rs. a. p.	Rs. a. p.			Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
0 4 0	0 0 4	1 Acids	Case	0 4 0	0 5 0	0 9 0	0 4 0	0 5 0	0 9 0
0 1 0	0 0 6	2 Aerated waters	One dozen	0 0 3	0 1 0	0 1 3	0 0 3	0 1 0	0 1 3
0 3 0	0 0 4	3 Ale, Beer, Porter and Cider, in wood	Hogshead	0 4 0	0 4 0	0 8 0	0 4 0	0 4 0	0 8 0
0 0 6	0 0 3	4 Ale, Beer, Porter and Cider, in bottles	One doz. qts. or 2 doz. pints	0 0 6	0 1 0	0 1 6	0 0 6	0 1 0	0 1 6
0 8 0	0 0 8	5 Do. do.	Kilderkins	0 2 0	0 2 0	0 4 0	0 2 0	0 2 0	0 4 0
0 8 0	0 0 8	6 Do. do.	Firkin	0 1 3	0 1 3	0 2 6	0 1 3	0 1 3	0 2 6
0 1 0	0 0 2	7 Almonds	Ton	0 12 0	1 0 0	1 12 0	0 12 0	1 0 0	1 12 0
0 8 0	0 0 8	8 Alum	"	0 12 0	1 4 0	2 0 0	0 12 0	1 4 0	2 0 0
0 8 0	0 0 8	9 Apparel, not accompanying passengers	Case or package	0 2 0	0 5 0	0 7 0	0 2 0	0 5 0	0 7 0
0 8 0	0 0 8	10 Arrowroot, country	Ton	0 12 0	1 8 0	2 4 0	0 12 0	1 8 0	2 4 0
0 8 0	0 0 4	11 Do. foreign	Case or package	Measurement.	Do.	...	Measurement.	Do.	...
0 8 0	0 0 4	12 Arsenic	Package	0 8 0	1 4 0	1 12 0	0 8 0	1 4 0	1 12 0
0 8 0	0 0 2	13 Asphalt	Ton	2 8 0	1 8 0	4 0 0	2 8 0	1 8 0	4 0 0
0 8 0	0 0 2	14 Assafetida, refined	"	0 4 0	0 5 0	0 9 0	0 4 0	0 5 0	0 9 0
0 8 0	0 0 2	15 Do. do.	Case or package	0 12 0	1 4 0	2 0 0	0 12 0	1 4 0	2 0 0
0 8 0	0 0 2	16 Do. coarse	Ton	2 0 0	3 0 0	5 0 0	2 0 0	3 0 0	5 0 0
1 0 0	1 0 0	17 Attar—see Oils, perfumed.	Each	2 0 0	3 0 0	5 0 0	2 0 0	3 0 0	5 0 0
		18 Bagatelle Tables							

Removal and Delivery Charges should Un-claimed Goods be removed from the Wharf to the Warehouse after the expiry of Free days allowed.	No. of Items.	Description of Goods.	How Charged.	Imports.			Exports.		
				Wharf- age Fee.	Dock and Landing Charges.	Total Charge, Wharf- age and Landing.	Wharf- age Fee.	Dock and Shipping Charges.	Total Charge, Wharf- age and Shipping.
				Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
0 2 0	0 2 0	Cardboards, straw boards	Case or bale	0 20	0 40	0 60	0 20	0 40	0 60
0 3 0	0 2 0	Carpets...	Case or package	0 40	0 70	0 110	0 40	0 70	0 110
0 1 0	0 2 0	Cardamoms	Cwt.	0 20	0 20	0 40	0 20	0 20	0 40
3 0 0	2 8 0	Do. bastard—see Spices.	Each	4 00	8 00	12 00	4 00	8 00	12 00
2 0 0	1 4 0	Carriages four-wheeled...	"	3 00	7 00	10 00	3 00	7 00	10 00
0 8 0	0 8 0	Do. two-wheeled	Ton	0 80	1 80	2 00	0 80	1 40	1 120
0 1 0	0 1 0	Cassa-ware	Each	0 10	0 16	0 26	0 10	0 16	0 26
0 0 9	0 0 6	Casks and Hogsheads, empty	"	0 06	0 09	0 13	0 06	0 09	0 13
0 2 0	0 1 6	Do. half and quarter	Ton	0 16	0 20	0 36	0 16	0 20	0 36
0 8 0	0 6 0	Butts, pipes and puncheons	"	0 80	1 40	1 120	0 80	1 40	1 120
0 8 0	0 6 0	Cement...	"	0 60	1 40	1 100	0 60	1 40	1 100
Measurement,		Chalk	Case	Measurement.		...	Measurement.		...
0 0 6	0 0 3	Cheese, in cases	Each	0 03	0 03	0 06	0 03	0 03	0 06
0 0 6	0 0 3	Do. loose							
0 0 6	0 0 3	Chemicals—see Drugs and Medi-							
0 8 0	0 8 0	Chillies, dried	Ton	0 90	1 40	1 130	0 90	1 40	1 130
0 8 0	0 8 0	China, copper cash	"	0 80	1 40	1 120	0 80	1 40	1 120
0 6 0	0 3 0	Do. white copper-ware	Case	0 30	0 50	0 80	0 30	0 50	0 80
0 3 0	0 2 0	Do. garden seats	Each	0 20	0 20	0 40	0 20	0 20	0 40
0 7 4	0 9 5	Do. and Japan-ware	Case	Measurement.		...	Measurement.		...
0 1 6	0 0 6	Do. ware in rolls, large	One dozen	0 30	0 30	0 60	0 30	0 30	0 60
0 1 6	0 0 6	Do. do. small	"	0 16	0 16	0 30	0 16	0 16	0 30
0 1 6	0 0 6	Do. Preserves, Chow-chow, &c.	Case of 1 doz. & over	0 20	0 30	0 50	0 20	0 30	0 50
0 1 0	0 0 3	Do. do.	Case of under 1 doz	0 10	0 20	0 30	0 10	0 20	0 30
0 8 0	0 8 0	Do. Roots	Ton	0 120	1 40	2 00	0 120	1 40	2 00

PRINCE'S DOCK CHARGES.

59

Measurement.	80	Cigars or Cheroots	...	Case	Measurement.	...	Measurement.
0 8 0	0 8 0	Clay, China and fire	...	Ton	0 8 0	1 8 0	0 8 0
0 3 0	0 2 0	Clocks	...	Case of under 8 c. ft.	0 4 0	0 4 0	0 8 0
0 6 0	0 4 0	Do.	...	Case over 8 c. ft.	0 8 0	0 6 0	0 14 0
0 8 0	0 2 0	Coal, coke, cinders, ashes patent fuel dust and rubbish...	...	Ton	0 2 0	0 12 0	0 2 0
0 3 0	0 2 0	Coconuts, in packages...	...	Package	0 1 0	0 2 0	0 3 0
0 1 3	0 1 0	Cochineal	...	Cwt.	0 2 0	0 1 3	0 3 3
0 8 0	0 8 0	Coffee	...	Ton	0 12 0	1 4 0	0 2 0
0 1 0	0 1 0	Coins, copper	...	Box or package	0 1 0	0 2 0	0 3 0
...	...	Do., gold and silver—see Bullion.	...	...	...	...	...
0 8 0	0 8 0	Coir, fibre	...	Ton	0 9 0	1 0 0	1 0 0
0 3 0	0 2 0	Coir, pressed	...	Bale	0 1 6	0 4 0	0 5 6
0 12 0	0 8 0	Coir rope, cable, cordage and yarn	...	Ton	0 9 0	0 12 0	1 5 0
0 8 0	0 8 0	Colombo-root	...	"	0 12 0	1 4 0	2 0 0
Measurement.	...	Confectonery	...	Case	Measurement.	...	Measurement.
0 12 0	0 6 0	Copper sheets	...	Ton	0 8 0	1 8 0	1 8 0
0 8 0	0 6 0	Do. cakes, slabs or tiles	...	"	0 8 0	1 4 0	1 8 0
0 8 0	0 6 0	Do. ware and wire	...	"	0 8 0	1 8 0	1 4 0
Measurement.	...	Do. do. when no weight is given	...	Package	Measurement.	...	Measurement.
0 12 0	0 8 0	Copperas, Sulphate of Iron and Sulphate of Copper	...	Ton	0 12 0	1 8 0	2 4 0
0 8 0	0 8 0	Copra	...	"	0 9 0	1 0 0	1 0 0
0 4 0	0 2 0	Coral	...	Box	0 8 0	0 5 0	0 13 0
Measurement.	...	Do. imitation	...	Case	Measurement.	...	Measurement.
0 12 0	0 10 0	Cordage and Rope—Hemp, Europe and Manila	...	Ton	0 12 0	1 8 0	2 4 0
0 8 0	0 8 0	Coriander seed	...	"	0 9 0	1 0 0	1 0 0
Measurement.	...	Corks	...	Bale or case	Measurement.	...	Measurement.
0 3 0	0 2 0	Cotton, raw, pressed*	...	Bale	0 1 0	0 4 0	0 5 0
0 6 0	0 3 0	Cotton, raw, unpressed	...	Bale or do. ca. of over 3 cwt.	0 1 0	0 8 0	0 9 0
0 3 0	0 1 0	Do.	...	Do. under 3 cwt.	0 0 6	0 4 0	0 4 6
0 8 0	0 8 0	Cowries	...	Ton	0 12 0	1 8 0	0 12 0
Special.	...	Crackers, China	...	Case of 1 picul of 133 lbs.	0 2 0	0 4 0	0 6 0
Do.	...	Do.	...	Do. under 1 picul.	0 1 0	0 3 0	0 4 0

* Cotton intended for export from Prince's Dock which has already paid the Trustees full wharfage fee on export from another Bunder is allowed to be landed at the Harbour side of the East wharf of the dock without payment of additional wharfage fee.

Removal and Delivery Charges should Un-claimed Goods be removed from the Wharf to the Warehouse after the ex-piry of five days allowed.	No. of Item.	Description of Goods.	How Charged.	Imports.			Exports.		
				Wharf- Landing Fee.	Dock and Landing Charges.	Total Charge, Wharf- age and Landing.	Wharf- age Fee.	Dock and Shipping Charges.	Total Charge, Wharf- age and Shipping.
				Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
0 8 0	0 8	Crockery, Queen's porcelain and earthenware	Crate or hhd.	Measurement.	1 40	1 80	Measurement.	1 40	2 12 0
0 8 0	0 8	Cumin seed	Case	Measurement.	0 90	1 80	Measurement.	0 90	2 10
0 8 0	0 8	Cutlery	"	Measurement.	0 90	1 00	Measurement.	0 90	1 90
0 8 0	0 8	Dammer	"	Measurement.	0 90	1 00	Measurement.	0 90	1 90
0 8 0	0 8	Dates, dry	"	Measurement.	0 90	1 00	Measurement.	0 90	1 90
0 8 0	0 8	Do. wet	"	Measurement.	0 90	1 00	Measurement.	0 90	1 90
0 2 0	0 1	Do. in pots	One doz. pots	Measurement.	0 40	0 20	Measurement.	0 40	0 60
0 12 0	0 8	Disinfecting powder	Ton	Measurement.	0 80	1 80	Measurement.	0 80	2 00
0 12 0	0 8	Drugs and medicines, foreign, not enumerated	Case	Measurement.	Measurement.	...	Measurement.	Measurement.	...
0 8 0	0 8	Dyes, country and foreign in bulk	Ton	Measurement.	0 120	1 40	Measurement.	0 120	2 00
0 3 0	0 1	Do. foreign	Case or package	Measurement.	0 20	0 50	Measurement.	0 20	0 70
0 3 0	0 1	Dragon's blood	"	Measurement.	0 20	0 50	Measurement.	0 20	0 50
0 12 0	0 8	Earthenware, foreign—see Crockery.	Ton	Measurement.	0 120	1 80	Measurement.	0 120	...
0 12 0	0 8	Earthenware, piping, retorts, &c., for drainage	Ton	Measurement.	0 120	1 80	Measurement.	0 120	...
0 12 0	0 8	Elephant's tusks and Moys's teeth—see Ivory.	Ton	Measurement.	0 120	1 80	Measurement.	0 120	...
0 4 0	0 2	Fans	Case	Measurement.	0 20	0 50	Measurement.	0 20	0 70
0 12 0	0 10	Fat, Grease, Lard, and Tallow	Ton	Measurement.	0 120	1 40	Measurement.	0 120	...
0 4 0	0 2	Feathers	Case or package	Measurement.	0 20	0 50	Measurement.	0 20	0 70
0 12 0	0 10	Felt	Bale	Measurement.	0 20	0 50	Measurement.	0 20	0 70
0 12 0	0 10	Fishmaws	Ton	Measurement.	0 20	0 50	Measurement.	0 20	0 70
0 4 0	0 2	Flax	Bale	Measurement.	0 20	0 50	Measurement.	0 20	0 70
0 12 0	0 8	Flour	Ton	Measurement.	0 120	1 80	Measurement.	0 120	...

BOMBAY PORT TRUST.

Removal and Delivery Charges should Un-claimed Goods be removed from the Wharf to the Warehouse after the expiry of Free days allowed.	Rent per Week, or part of a Week, for Un-claimed Goods Warehoused.	No. of Item.	Description of Goods.	How Charged.	Imports.			Exports.		
					Wharf- age Fee.	Dock and Landing Charges.	Total Charge, Wharf- age and Landing.	Wharf- age Fee.	Dock and Shipping Charges.	Total Charge, Wharf- age and Shipping.
					Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
0 8 0	0 6	167	Hats & Caps—see Haberdashery.	Bale	0 0 6	0 4 0	0 4 6	0 0 6	0 4 0	0 4 6
0 4 0	0 2	168	Hay and straw, pressed	Ton	0 9 0	1 4 0	1 13 0	0 9 0	1 4 0	1 13 0
0 4 0	0 2	169	Hemp, loose, in bundles	Bale	0 1 0	0 5 0	0 6 0	0 1 0	0 2 0	0 3 0
0 8 0	0 4	170	Do. pressed	"	0 3 0	0 5 0	0 8 0	0 3 0	0 5 0	0 8 0
0 8 0	0 4	171	Hessians	One hundred	0 8 0	0 8 0	1 0 0	0 8 0	0 8 0	1 0 0
0 12 0	0 8	172	Hides, buffalo, &c.	Ton	0 12 0	1 4 0	2 0 0	0 12 0	0 10 0	1 6 0
...	...	173	Horns of kinds	"	0 8 0	1 4 0	1 12 0	0 8 0	1 4 0	1 12 0
...	...	174	Ice	Free	...	...	...	...	...	...
...	...	175	Do. small quantities for use of ships in dock	Case	...	...	...	...	...	...
Measurement.	...	176	Incense—see Olibanum.	Ton	Measurement.	...	...	Measurement.	...	...
0 8 0	0 8	177	Indian Condiments	"	1 0 0	1 8 0	2 8 0	1 0 0	1 0 0	2 0 0
Measurement.	...	178	Indigo	Case	...	...	...	...	...	...
...	...	179	Mathematical, musical, &c., not enumerated	Case	Measurement.	...	...	Measurement.	...	...
0 6 0	0 3	180	Ink	Case or package.	0 3 0	0 8 0	0 11 0	0 3 0	0 8 0	0 11 0
0 8 0	0 4	181	Do.	Cask	0 4 0	0 10 0	0 14 0	0 4 0	0 10 0	0 14 0
0 8 0	0 8	182	Ironmongery	Ton	0 12 0	1 8 0	2 4 0	0 12 0	1 4 0	2 0 0
Measurement.	...	183	Ironmongery, when no weight given	Package	Measurement.	...	...	Measurement.	...	...
0 8 0	0 4	184	Iron—Bar, hoop, pig, rod, scrap, sheets, bands, angle I, and old and steel hoop	Ton	0 6 0	0 14 0	1 4 0	0 6 0	0 14 0	1 4 0
0 12 0	0 6	185	Do. other than the foregoing, including girders, castings, pipes, &c., under 1½ tons weight	"	0 8 0	1 4 0	1 12 0	0 8 0	1 4 0	1 12 0

Removal and Delivery Charges should Un-claimed Goods be removed from the Wharf to the Warehouse after the expiry of Free days allowed.		Rent per Week, or part of a Week, for Un-claimed Goods Warehoused.	No. of Item.	Description of Goods.	How Charged.	Imports.			Exports.			
Rs. a. p.	Rs. a. p.	Rs. a. p.				Wharf- age Fee.	Dock and Landing Charges.	Total Charge, Wharf- age and Landing.	Rs. a. p.	Wharf- age Fee.	Dock and Shipping Charges.	Total Charge, Wharf- age and Shipping
1 0 0	1 0	0 265	Precious Stones	...	Box or case	0 8 0	0 8 0	1 0 0	Rs. a. p.	0 8 0	0 8 0	1 0 0
...	...	0 269	Provisions, fresh, for voyage*	...	Coolie-load	0 1 0	...	0 1 0	...	0 1 0	...	0 1 0
...	...	0 270	Do. for daily use of ships	in dock								
0 2 0	0 1	0 271	Quicksilver	...	Free	0 2 0	0 3 0	0 5 0	...	...	...	...
0 2 0	0 1	0 272	Rags	...	Bottle	0 1 0	0 3 0	0 4 0	0 2 0	0 1 0	0 2 0	0 5 0
Special.	Special.	0 273	Railway plant and materials	...	Bale or package	See	special	rates at	pp70&91			0 3 0
0 12 0	0 8	0 274	Raisins—see Fruits, dried.	...	Ton	0 12 0	1 8 0	2 4 0	0 12 0	0 12 0	1 8 0	2 4 0
0 1 0	0 0	0 275	Rattans	...		0 1 0	0 2 0	0 3 0	0 1 0	0 2 0	0 3 0	0 3 0
0 8 0	0 8	0 276	Rattans, Malacca	...	One dozen.	0 12 0	1 8 0	2 4 0	0 12 0	0 12 0	1 8 0	2 4 0
0 1 6	0 1	0 277	Rose flowers, dried	...	Ton	0 1 6	0 3 0	0 4 6	0 1 6	0 3 0	0 3 0	0 4 6
0 1 0	0 0	0 278	Rose-water	...	Case	0 0 6	0 1 6	0 2 0	0 0 6	0 1 6	0 1 6	0 2 0
0 8 0	0 8	0 279	Do.	...	Carboy	0 12 0	1 8 0	2 4 0	0 12 0	0 12 0	1 8 0	2 4 0
0 8 0	0 8	0 280	Rope—see Cordage.	...	Ton	0 12 0	1 8 0	2 4 0	0 12 0	0 12 0	1 8 0	2 4 0
0 8 0	0 8	0 281	Rosin	...		1 0 0	1 8 0	2 8 0	1 0 0	0 12 0	1 8 0	2 4 0
0 8 0	0 8	0 282	Saddlery—see Harness.	...		0 12 0	1 8 0	2 4 0	0 12 0	0 12 0	1 8 0	2 4 0
0 8 0	0 8	0 283	Safflower	...		Measurement.	Measurement.	...	Measurement.	Measurement.	Measurement.	...
0 8 0	0 8	0 284	Sago	...		0 12 0	1 8 0	2 4 0	0 12 0	0 12 0	1 8 0	2 4 0
Measurement.	Measurement.	0 285	Sago	...	Case or package	0 12 0	1 8 0	2 4 0	0 12 0	0 12 0	1 8 0	2 4 0
0 8 0	0 8	0 286	Salammoniac	...	Ton	0 4 0	0 12 0	1 0 0	0 4 0	0 4 0	0 12 0	1 0 0
...	...	0 287	Salt, Country	...								
...	...	0 288	Do. Refined—see Oilman's stores	...								
0 1 0	0 0	0 289	Samples, Cotton, small	...	Free	0 1 0	0 2 0	0 3 0	0 1 0	0 2 0	0 3 0	0 3 0
0 1 0	0 0	0 290	Samples and Trusses, other than above	...	Parcel	Measurement.	Measurement.	...	Measurement.	Measurement.	Measurement.	...
Measurement.	Measurement.	0 291	Do. do. in cases	...	Case							

0 8 0	0 8 0	0 292	Sandalwood	...	...	...	1 0 0	1 0 0	2 0 0	1 0 0	1 0 0	2 0 0
0 2 0	0 1 0	0 293	Do.	boxes and ware	...	...	0 2 0	0 5 0	0 7 0	0 2 0	0 5 0	0 7 0
0 8 0	0 8 0	0 294	Sapanwood	...	...	...	0 10 0	1 0 0	1 10 0	0 10 0	0 12 0	1 6 0
0 6 0	0 4 0	0 295	Seeds, oil—Linseed, Teel, Rape, Mustard, Castor, Niger, Poppy, &c.	...	...	...	0 8 0	0 6 0	0 14 0	0 8 0	0 6 0	0 14 0
0 12 0	0 8 0	0 296	Seeds, other than oil seeds, unenumerated	...	...	...	0 12 0	1 4 0	2 0 0	0 12 0	1 0 0	1 12 0
0 8 0	0 8 0	0 297	Senna Leaves	...	...	...	0 12 0	1 8 0	2 4 0	0 12 0	1 0 0	1 12 0
1 0 0	1 0 0	0 298	Shark Fins	...	...	...	1 4 0	1 8 0	2 4 0	1 4 0	1 0 0	2 4 0
0 8 0	0 4 0	0 299	Shawls, Cashmere and Delhi	...	...	...	0 8 0	0 6 0	0 14 0	0 8 0	0 4 0	0 12 0
0 4 0	0 2 0	0 300	Do. European	...	...	...	Measurement.	...	...	Measurement.	...	...
0 8 0	0 8 0	0 301	Shellac	...	...	...	1 0 0	1 8 0	2 8 0	1 0 0	0 12 0	1 12 0
0 3 0	0 2 0	0 302	Shells, in cases, unenumerated	...	...	...	0 2 0	0 5 0	0 7 0	0 2 0	0 5 0	0 7 0
0 8 0	0 8 0	0 303	Do. merated	...	...	...	0 12 0	1 4 0	2 0 0	0 12 0	0 12 0	1 8 0
0 1 6	0 1 0	0 304	Shovels	...	...	...	0 1 0	0 2 0	0 3 0	0 1 0	0 2 0	0 3 0
0 4 0	0 2 0	0 305	Silk, raw	...	...	...	0 4 0	0 6 0	0 10 0	0 4 0	0 6 0	0 10 0
...	...	0 306	Silk Piece Goods—see Piece Goods	...	...	...	0 2 0	0 5 0	0 7 0	0 2 0	0 5 0	0 7 0
...	...	0 307	Silver-ware—see Bullion.	...	...	...	Measurement.	...	...	Measurement.	...	...
...	...	0 308	Skins, Goat and Sheep, tanned	...	...	...	Do.	...	...	Do.	...	...
...	...	0 309	Soap, perfumed, foreign	...	...	...	0 12 0	1 4 0	2 0 0	0 12 0	1 4 0	2 0 0
...	...	0 310	Do. bar	...	...	...	0 8 0	1 4 0	1 12 0	0 8 0	1 4 0	1 12 0
...	...	0 311	Do. soft country,	...	...	...	...	...	...	...	...	...
0 8 0	0 4 0	0 312	Spelter and Solder	...	...	...	0 12 0	1 4 0	2 0 0	0 12 0	1 4 0	2 0 0
1 0 0	0 12 0	0 313	Spices—cinnamon, mace, nutmegs, cloves, bastard cardamoms, and others unenumerated	...	...	...	0 8 0	1 4 0	1 12 0	0 8 0	1 4 0	1 12 0
...	...	...	Spices—cardamoms—see Special rate for Cardamoms.	...	...	...	0 12 0	1 4 0	2 0 0	0 12 0	0 12 0	1 8 0
0 0 1 1/2	0 0 0	0 314	Spirits, liquors & wines, in wood	...	...	...	0 0 2	0 0 1 1/2	0 0 3 1/2	0 0 2	0 0 1 1/2	0 0 3 1/2
0 0 9	0 0 0	0 315	Do. in bottle	...	...	...	0 1 0	0 1 0	0 2 0	0 1 0	0 1 0	0 2 0
...	...	...	Stationery, unenumerated	...	...	...	Measurement.	...	...	Measurement.	...	...
0 8 0	0 4 0	0 316	Steel	...	...	...	0 8 0	1 0 0	1 8 0	0 8 0	1 0 0	1 8 0
0 12 0	0 8 0	0 317	Sugar and Sugarcandy	...	...	...	0 12 0	0 6 0	1 2 0	0 12 0	0 12 0	1 8 0
0 2 0	0 1 0	0 318	Do. Loaf	...	...	...	0 2 0	0 3 0	0 5 0	0 2 0	0 3 0	0 5 0
0 8 0	0 8 0	0 319	Sulphur...	...	...	...	0 12 0	1 8 0	2 4 0	0 12 0	1 8 0	2 4 0

* NOTE.—No Dock charges but only wharfage fees will be charged on all *bona fide* ships' stores such as furniture tools for repairs, &c., as is the case with regard to fresh provisions. No overside charges will be levied on ships' stores; only dock dues on the boats carrying the same.

Removal and Delivery Charges should Un-claimed Goods be removed from the Warehouse after the expiry of Free days allowed.	Rent per Week, or part of a Week, for Un-claimed Goods warehoused.	No. of Item.	Description of Goods.	How Charged.	IMPORTS.			EXPORTS.		
					Wharf- age Fee.	Dock and Landing Charges.	Total Charge, Wharf- age and Landing.	Wharf- age Fee.	Dock and Shipping Charges.	Total Charge, Wharf- age and Shipping
Rs. a. p.	Rs. a. p.				Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
			Tallow—see Fat.							
0 8 0	0 8 0	0 321	Tar	Ton	0 12 0	1 8 0	2 4 0	0 12 0	1 8 0	2 4 0
0 2 0	0 1 0	0 322	Tea	Chest of 60 lbs	0 2 0	0 1 6	0 3 6	0 2 0	0 1 6	0 3 6
0 1 0	0 0 0	0 323	Do.	Half chest	0 1 0	0 1 0	0 2 0	0 1 0	0 1 0	0 2 0
0 1 0	0 0 0	0 324	Do.	Pkg. below 30 lbs	0 0 6	0 0 6	0 1 0	0 0 6	0 0 6	0 1 0
0 3 0	0 0 1	0 325	Thread	Case	0 2 0	0 4 0	0 6 0	0 2 0	0 3 0	0 5 0
0 12 0	0 0 8	0 326	Tiles, flooring	Ton	0 12 0	1 8 0	2 4 0	0 12 0	1 8 0	2 4 0
0 12 0	0 0 8	0 327	Do. foreign, &c.	1,000	1 8 0	1 8 0	3 0 0	1 8 0	1 8 0	3 0 0
0 12 0	0 0 8	0 328	Do. Mangalore	Regd. Ton of vessel	0 4 0	1 8 0	1 12 0	0 4 0	1 8 0	1 12 0
0 12 0	0 0 4	0 329	Timber — Blackwood, Ebony, Teak, and Pine in logs, and squares							
0 12 0	0 0 4	0 330	Do. planks and Scantlings	Ton of 50 cubic feet	0 8 0	1 4 0	1 12 0	0 8 0	1 4 0	1 12 0
0 8 0	0 0 4	0 331	Tin of kinds	"	0 8 0	0 12 0	1 4 0	0 8 0	0 12 0	1 4 0
0 4 0	0 0 2	0 332	Tin Plates	Box	0 0 6	0 1 0	0 1 6	0 0 6	0 0 9	0 1 3
0 4 0	0 0 2	0 333	Tobacco, foreign or manufactured	Case	0 2 0	0 4 0	0 6 0	0 2 0	0 4 0	0 6 0
Measurement.	Measurement.	334	Do. country	Bale	Measurement.	Measurement.	Measurement.	Measurement.	Measurement.	Measurement.
0 4 0	0 0 2	0 335	Tortoise Shell	Case	0 4 0	0 5 0	0 9 0	0 4 0	0 5 0	0 9 0
Measurement.	Measurement.	336	Toys	"	Measurement.	Measurement.	Measurement.	Measurement.	Measurement.	Measurement.
0 2 0	0 0 1	0 337	Trunks and Boxes	Each	0 2 0	0 4 0	0 6 0	0 2 0	0 4 0	0 6 0
0 6 0	0 0 6	0 338	Turneric	Ton	0 12 0	1 4 0	2 0 0	0 12 0	0 12 0	1 8 0
0 4 0	0 0 2	0 339	Turpentine	Ten gals.	0 1 0	0 1 0	0 2 0	0 1 0	0 1 0	0 2 0
0 4 0	0 0 2	0 340	Twist and Yarn	Bale	0 2 0	0 4 0	0 6 0	0 2 0	0 2 3	0 4 3
Measurement.	Measurement.	341	Umbrellas	Case	Measurement.	Measurement.	Measurement.	Measurement.	Measurement.	Measurement.
0 1 0	0 0 0	0 342	Varnish	Five gals.	0 1 0	0 1 6	0 2 6	0 1 0	0 1 6	0 2 6
0 1 0	0 0 0	0 343	Vegetables, fresh, for voyage	Coolie-load	0 0 6	0 1 0	0 1 6	0 0 6	0 1 0	0 1 6

No.	Description	Measurement.	Cart-load	Case of 1 cwt.	Ton	Case	Docr up to 1 1/2 cwt.	to 3 cwt.	Bale or bora	Bale	Ton	Package	Ton	Coolie-load
334	Vegetables, fresh, for voyage	...	...	...	...	...	...	...	...	...	...	...	...	...
335	Vermilion	0 2 0	0 1 0	0 4 0	0 7 0	0 3 0	0 2 0	0 4 0	0 6 0	0 1 0	0 4 0	0 2 0	0 1 0	0 2 0
336	Waste Cotton Twist & Wool	...	...	...	...	...	...	...	...	...	...	...	...	...
337	Watches, gold and silver	0 8 0	0 8 0	0 1 6	0 2 6	0 1 0	0 2 0	0 1 0	0 3 0	0 1 0	0 1 6	0 2 0	0 1 0	0 2 6
338	Do. other than above	0 4 0	0 4 0	0 8 0	0 12 0	0 4 0	0 8 0	0 1 0	0 3 0	0 4 0	0 8 0	0 1 0	0 4 0	0 1 0
339	Whiting	0 8 0	0 8 0	1 8 0	2 0 0	0 8 0	0 8 0	1 8 0	0 4 0	0 8 0	1 8 0	0 8 0	0 8 0	0 12 0
340	Wines, &c.—see Spirits.	...	...	...	...	...	...	...	...	...	...	...	...	...
341	Wire, bottling	...	...	...	...	...	...	...	...	...	...	...	...	...
342	Do. of sorts, unenumerated	1 0 0	0 8 0	1 8 0	2 4 0	0 12 0	0 1 0	0 1 0	0 2 0	0 12 0	1 8 0	0 2 0	0 1 0	0 2 4 0
343	Do. when no weight is given	...	...	...	...	...	...	...	...	...	...	...	...	...
344	Wool, unpressed	0 3 0	0 0 1	0 3 4	0 6 0	0 2 0	0 4 0	0 6 0	0 3 0	0 4 0	0 6 0	0 2 0	0 4 0	0 6 0
345	Do.	0 4 0	0 0 2	0 3 5	0 9 0	0 3 0	0 6 0	0 9 0	0 3 0	0 6 0	0 9 0	0 3 0	0 6 0	0 9 0
346	Do.	0 4 0	0 0 2	0 3 5	0 12 0	0 4 0	0 8 0	0 12 0	0 4 0	0 8 0	0 12 0	0 4 0	0 8 0	0 12 0
347	Do. pressed	0 3 0	0 0 2	0 3 5	0 5 0	0 1 0	0 4 0	0 5 0	0 1 0	0 4 0	0 5 0	0 1 0	0 4 0	0 5 0
348	Do. Berlin—see Haberdashery.	...	...	...	...	...	...	...	...	...	...	...	...	...
349	Woolens—see Piece Goods.	...	...	...	...	...	...	...	...	...	...	...	...	...
350	Yellow metal, sheets, sheathing and braziers	0 12 0	0 0 6	0 3 6	2 0 0	0 8 0	1 8 0	2 0 0	0 8 0	1 8 0	2 0 0	0 8 0	1 8 0	2 0 0
351	Zinc Sheathing	0 8 0	0 0 6	0 3 6	2 0 0	0 8 0	1 8 0	2 0 0	0 8 0	1 8 0	2 0 0	0 8 0	1 8 0	2 0 0
352	On all Goods not enumerated, if in cases, bales, crates, or casks, and for all goods specified to be charged for by measurement, the rates will be:—	...	...	...	...	...	...	...	...	...	...	...	...	...
353	If under 3 cubic feet	0 1 0	0 0 0	9 3 6	0 2 0	0 1 0	0 1 0	0 2 0	0 1 0	0 1 0	0 2 0	0 1 0	0 1 0	0 2 0
354	If 3 or under 5 cubic feet	0 1 6	0 0 1	9 3 6	0 4 0	0 2 0	0 2 0	0 4 0	0 2 0	0 2 0	0 4 0	0 2 0	0 2 0	0 4 0
355	If 5 or under 10 cubic feet	0 2 6	0 0 1	9 3 6	0 6 0	0 3 0	0 3 0	0 6 0	0 3 0	0 3 0	0 6 0	0 3 0	0 3 0	0 6 0
356	If 10 or under 15 cubic feet	0 4 0	0 0 2	9 3 6	0 8 0	0 4 0	0 4 0	0 8 0	0 4 0	0 4 0	0 8 0	0 4 0	0 4 0	0 8 0
357	If 15 or under 20 cubic feet	0 5 0	0 0 2	9 3 6	0 10 0	0 5 0	0 5 0	0 10 0	0 5 0	0 5 0	0 10 0	0 5 0	0 5 0	0 10 0
358	If 20 or under 30 cubic feet	0 6 0	0 0 3	9 3 6	0 14 0	0 7 0	0 7 0	0 14 0	0 7 0	0 7 0	0 14 0	0 7 0	0 7 0	0 14 0
359	If 30 or under 40 cubic feet	0 10 0	0 0 5	9 3 6	0 20 0	0 10 0	0 10 0	0 20 0	0 10 0	0 10 0	0 20 0	0 10 0	0 10 0	0 20 0
360	If 40 or under 50 cubic feet	0 14 0	0 0 7	9 3 6	0 26 0	0 14 0	0 14 0	0 26 0	0 14 0	0 14 0	0 26 0	0 14 0	0 14 0	0 26 0
361	If 50 or under 60 cubic feet	1 0 0	0 0 8	9 3 6	0 32 0	0 16 0	0 16 0	0 32 0	0 16 0	0 16 0	0 32 0	0 16 0	0 16 0	0 32 0
362	For every 10 cubic or part of 10 cubic ft. additional	0 1 0	0 0 0	9 3 6	0 2 0	0 1 0	0 1 0	0 2 0	0 1 0	0 1 0	0 2 0	0 1 0	0 1 0	0 2 0
363	On all goods not enumerated chargeable by weight	1 4 0	0 0 8	9 3 6	2 4 0	0 12 0	0 12 0	2 4 0	0 12 0	0 12 0	2 4 0	0 12 0	0 12 0	2 4 0
364	Sundries unmanifested	...	...	...	...	...	...	...	...	...	...	...	...	...

1. The following charges will be made for loading and unloading carts at the Dock :—

For spirits, wines, candles, copper and yellow metal in cases—
1½ annas per cart.

For other goods except machinery—1 anna per cart.

For machinery by truck—special rates.

The Traffic Manager has discretionery power to allow consignees or shippers to load or unload carts.

2. Transshipment of goods, if supported by Customs documents, will be permitted free.

3. *Rents A.—Import Goods except Iron and Steel*, as specified under item No. 183. Dutiable goods will be allowed 7 days and duty-free goods 5 days free of rent after landing. After these free days have expired, extra rents will be incurred for every 3 days, or part of 3 days, at the rate of wharfage fee to which the goods may be liable. Immediately after the expiry of free days, goods may be removed into the warehouse for unclaimed goods. No free days will be allowed for coal, cinders, ashes, patent fuel, dust, or rubbish.

B.—Iron and Steel, as specified under item No. 183, will be allowed 7 days free of rent after landing ; there after ground rent will be charged for space occupied at the rate of Rs. 20 for 500 square feet per mensem in the open air, and Rs. 30 for 500 square feet per mensem in sheds.

Goods for Export. A.—Goods brought for shipment when no vessel is named, will be charged rent from the date of the receipt of the goods to the date on which a vessel may be named.

B.—Goods brought for shipment by any vessel which may be named, will be allowed 10 days free of rent if the goods be kept in the open and 7 days if the goods be kept in the sheds. Exporters must elect where goods are to be placed, whether in the open air or in sheds.

D.—Goods brought for shipment, but which may not be shipped but removed by cart, will be charged rent from the date on which they were brought for shipment.

E.—Part shipments shut out owing to no fault of the shipper, but because of the vessel being full, shall, if removed by cart or boat receive the benefit of the free days as if the goods had been taken by the vessel.

F.—After the free days have expired, rent will be incurred for every 3 days, or part of 3 days, at the rate of wharfage fee to which the goods may be liable.

G.—In computing the days for charging rents, Sundays and such holidays as may be notified in the *Government Gazette*, as well as any days on which Imperial duty may not be received, will be omitted.

H.—Shut out cargo will be allowed to remain in the Transit sheds or in the open free of rent for 24 working hours from the departure from the Dock of the vessel in which it was intended to be shipped.

4. Consignees of specie must themselves take delivery from the ship.

5. Ships stores and coal, for consumption on board the vessel to which they are taken, may be conveyed in lighters into Dock, and taken on board from such lighters free of overside charge.

6. Import goods delivered into lighters alongside for removal out of Dock will be charged $\frac{1}{2}$ of the combined charge for wharfage and Dock charges; export goods taken on board from lighters alongside will be charged $\frac{1}{2}$ the combined charges for wharfage and Dock charges. Vessels desiring to discharge overside coal or other articles not allowed on the wharf in order to avail themselves of wharf facilities for the rest of their cargo may be allowed to do so free of overside delivery charge provided that the goods so put out do not amount to more than one-fifth of the entire cargo. Any quantity in excess of this proportion to pay the usual rates.

7. Vessels will be charged 2 annas per ton for cramage should Dock cranes be made use of for loading export cargo.

8. The rate for cramage, two annas per ton, mentioned in Rules Nos. 7 and 19, only refers to such goods as can be lifted by the ordinary $1\frac{1}{2}$ ton cranes. All other goods will be charged for at the special rates laid down for heavier lifts.

9. Burst bales, &c., relanded in course of shipment, for repacking will not be charged a second wharfage fee.

10. Railway materials for the G. I. P. and B. B. and C. I. Railway Companies will be allowed free overside delivery in the Dock, and lighters employed to remove the same will be exempted from Dock dues.

11. Ballast brought from a Port Trust Bunder, and on which wharfage fees have been paid, will be allowed into Dock free of charge, and similarly all ballast taken out of a vessel in Dock by boats may be passed free, if removed to a Port Trust Bunder. Ballast brought from private bunders or from across the harbour into Dock will be charged the Trustees' "outlying Bunders" wharfage fee, but ballast brought or taken away by cart will be charged 4 annas per ton.

12. The Trustees will only accept responsibility for damage which may be caused by want of reasonable care on the part of their own servants.

13. In addition to the foregoing charges on goods every square-rigged vessel using the Dock (except those troopships and regular liners for which special rates may be arranged); will be charged 4 pies per ton per diem.

Vessels occupying a berth on the outside face of the Dock shall be charged half dock dues in every case in which there may not be a berth available inside the Dock.

Vessels not to be charged for Sundays or the following Holidays when no work is done,—New Year's Day, Good Friday, Queen's Birthday and Christmas Day.

A vessel lying in Dock without cargo waiting for charter or cargo, and not working, shall nevertheless be charged full dock dues for the time she so lies idle, and must give up her berth, if required, to a working vessel.

A vessel which may have remained in the Dock idle for five days may be ordered out of Dock by the Superintendent should the space she occupies whether next to the quay or not be required.

Should a vessel in three weather working days load less than 500 tons she will be liable to have to give up her berth to a working vessel.

Should a vessel in eight days load less than 2,000 tons she will be liable to be ordered out of Dock.

14. Dock dues on all country craft (not square-rigged) will be charged at the rate of 2 pies per ton per diem.

15. The charges for night work at Prince's Dock shall be as follows :—

When Dock cranes are made use of, Rs. 60 per night from 6 P.M. to 6 A.M.

Do. Rs. 30 per half-night, from 6 P.M. to midnight.

When Dock cranes are not made use of, Rs. 30 per night, from 6 P.M. to 6 A.M.

Do. Rs. 15 per half-night from 6 P.M. to midnight.

When gate are opened for receiving and delivering cargo, Rs. 15 per night from 6 P.M. to 6 A.M.

When gate are opened for receiving and delivering cargo, Rs. 7½ per half-night from 6 P.M. to midnight, or from midnight to 6 A.M.

16. "The following extra rates will be charged for work done in Prince's Dock on Sundays and on Holidays are sanctioned :—

If Dock cranes are used Rs. 60 per diem.

Do. „ 30 per ½ day.

If Dock cranes are not used..... „ 30 per diem.

Do. „ 15 per ½ day.

When vessels are not loaded or discharged a fee of Rs. 15 per day and Rs. 7½ per half day will be charged for opening gates and for receiving or delivering cargo."

17. Boats using the East wharf of the Prince's Dock should pay the regular Bandar rates on goods and boats.

18. Claims for refunds must be made within 2 months.

19. On goods landed at the Dock for transshipment single wharfage as a transshipment fee to be charged also 2 annas per ton import and 2 annas per ton export crantage when Dock cranes are used, the wharfage fee to cover the right to deposit on wharf 3 days thereafter the ordinary dock ground or shed rent charges to be levied, the ship to make its own arrangement for handling the goods.

20. Vessels desiring to discharge overside coal or other articles not allowed on the wharf in order to avail themselves of wharf facilities for the rest of their cargo may be allowed to do so free of overside delivery charge provided that the goods so put out do not amount to more than one-fifth of the entire cargo any quantity in excess of this proportion to pay the usual rates.

21. The Port Trustees will not be liable or responsible in any way for lost or damaged goods, *e.g.*, chafages, breakages and short deliveries, of which notice has not been given within one month from the date of landing or shipping, as the case may be.

connection with the landing and shipment of goods at Prince's Dock :—

1. The Dock Superintendent is authorized to land, at the expense of the Trust, whatever quantity of cargo may be necessary to enable a vessel to come into Dock, should it appear to him desirable to incur such expense. The goods so landed to be liable to ordinary Dock rates.

2. The Trustees will send out free of charge to vessels in the stream (ordinary Dock rates having previously been paid) such quantity of cargo not exceeding 500 ton as, owing to insufficient depth of water, such vessels may be unable to load while in Dock, provided that the vessel to which cargo may be taken shall have loaded in Dock to the greatest extent that the depth of water there will allow, prior to sailing.

3. The Trustees will not be responsible for delay, dead freight, or on any other account than for loss or damage to goods by or through the default or negligence of their servants or contractors.

4. Goods will only be sent out to the stream on the written order of the Agent specifying description and quantity; or in the case of a vessel having no Agents, then under such special arrangements as the Dock Superintendent may consider necessary for the security of the Trust.)

5. In the case of cargo sent out to a vessel in the stream and there shut out, the ship's Agents will be required to pay for its loading and taking out and for its return and landing at the Dock, or, if so directed by the Agents, at any Bandar, at the rate of Rupee one per ton.

Under the authority of Trustees' Resolution No. 489, dated 13th November 1883, a charge of 3 annas per ton will be levied, from the ship or from the consignees, as the case may be, for sorting iron which is landed in a mixed condition.

When the Dock pontoon is used by any vessel for the purpose of effecting repairs a charge of Rs. 5 for a day, or Rs. 10 for a day and night, will be levied.

BOMBAY PORT TRUST.

RULES FOR GUIDING ISSUE OF WARRANTS, CHARGES, &c.

1. Warrants will be issued on application (provided that there is no lien for freight or otherwise) upon payment of wharfage, landing and other charges, and all subsequent charges must be paid by the holder of the warrant before delivery of the goods.

2. Warrants will be transferable by endorsement without production.

3. Proprietors of goods may clear rent and incidental charges on goods covered by warrant up to any desired date and have new warrants accordingly.

4. Warrants will be made out for such quantities of goods as may be convenient to importers, provided the lotting operations are satisfactorily completed beforehand.

5. Should delivery of the whole contents of a Warrant be directed, and the goods not be removed within two days, a new warrant for the remainder of the goods must be taken out.

6. When the holders of warrants are desirous of assigning part contents without delivery, re-weighing, re-housing, &c., new documents may be obtained in exchange of the originals on lodging the originals duly endorsed. The endorsement should specially direct the manner in which the contents are to be divided, and state the names of the parties in whose favour the warrants are to be issued, in the following form:—

"Please to divide the within" or when part is to be delivered, "Deliver to bearer (state how many packages) and grant new _____ one for (state how many packages) in favour of _____ one for, &c."

7. Warrants may be, if desired by the holders, exchanged or divided without assigning the goods, at the same rate of charge.

8. Original Warrants will be granted free of charge beyond the cost of stamp, but for other warrants the charge will be as follows, in addition to the cost of stamps:—

FOR EACH WARRANT.

1 to	2 Packages or Quantities...	As.	½
3 to 4	"	"	1
5 to 7	"	"	1½
8 to 10	"	"	2
11 to 15	"	"	2½
16 to 20	"	"	3
21 to 25	"	"	3½
26 to 30	"	"	4
31 to 35	"	"	5
36 to 40	"	"	6
41 to 45	"	"	7
46 and upwards	...	"	8
Goods in bulk, per ton		"	2

9. If from the nature of the contract between the seller and the buyer, re-weighing may be necessary, new warrants, if desired, will be issued on depositing the warrants endorsed with directions to that effect, containing the landing weights and re-weights as soon as the operations are completed.

10. When any alterations, such as re-packing, &c., are to be made (except when preparatory to immediate delivery), the warrants must be lodged and others representing the goods correctly issued in the same manner.

11. In the case of casks of liquids used to fill up others, the warrant must be lodged, and the proprietor may either have a new warrant for the remainder, or it may be delivered (if not required to be used again) in the same way to his order.

12. In the last three mentioned cases the charges for performing the operations include the expense of the new warrants.

13. When warrants are lost or mislaid, the circumstance should be advertised and an engagement to indemnify the Port Trust by bond or otherwise enclosed with the application for duplicates. New documents will not be issued (unless the originals shall be found and delivered up) until seven clear days have elapsed from the date of notice by advertisement. Upon notice being given of the loss, the goods will be stopped, and the original document will on no account be acted upon unless the matter is satisfactorily explained in writing.

14. Irregularities in the endorsements lessen the security of the proprietors of goods, and render documents incomplete as authorities. The attention of the holders of warrants is therefore particularly called to that point, to prevent the impediments which must otherwise arise to the regular despatch of business; but they must not attempt to remove such impediments by endorsing any warrant without due authority.

15. When parties holding orders for delivery from the quays wish the goods housed in their own names or in the names of other parties, they must lodge the order endorsed to that effect, and warrants will be granted accordingly.

16. Weight notes corresponding to the warrants will be furnished when required, at a charge of annas each.

WAREHOUSE DEPARTMENT.

Scale of Charges for Goods on which Warrants may be granted by the Bombay Port Trust.

Goods.	Per	Storage and Delivery Charges.	Rent per Week or portion of a Week.
		Rs. a. p.	Rs. a. p.
1. Alum	Ton	0 8 0	0 1 0
2. Beef and Pork	Tierce	0 4 0	0 0 6
3. Do. do.	Barrel	0 3 0	0 0 4
4. Canvas	Bale up to 12 c. ft.	0 2 0	0 0 6
5. Do.	Bale above 12 c. ft.	0 3 0	0 1 0
6. Cardamoms	Cwt.	0 0 6	0 0 2
7. Cement	Ton	0 8 0	0 1 0
8. Coffee	"	0 8 0	0 1 0
9. Coir Yarn	"	0 8 0	0 2 0
10. Copperas	"	0 8 0	0 1 0
11. Cotton	Bale	0 1 6	0 0 4
12. Cutlery	Pkg. For every 2 c. ft.	0 0 4	0 0 1
13. Fibre	Bale	0 1 0	0 0 4
14. Ginger, dry	Ton	0 6 0	0 1 0

GOODS.	Per	Storage and Delivery Charges.	Rent per Week or portion of a Week.
		Rs. a. p.	Rs. a. p.
15. Glassware and Earthenware...	Pkg. up to 12 c. ft. ...	0 2 0	0 0 6
16. Do. do.	Pkg. above 12 c. ft. ...	0 3 0	0 1 0
17. Grain	Ton	0 5 0	0 0 8
18. Ground Nuts	"	0 5 0	0 0 8
19. Gums	"	0 8 0	0 1 0
20. Gunnies	Per 50 bags or pieces.	0 0 9	0 0 2
21. Do			
22. Hardware	Pkg. For every 2 c. ft.	0 0 4	0 0 1
23. Hessians, same as for Canvas.			
METALS—			
24. Iron—Hoop, Sheet, Nail & Rod	Ton	0 8 0	0 0 8
25. Iron—Bars and Bundles	"	0 6 0	0 0 6
26. Copper & Yellow Metal, in cases	"	0 10 0	0 1 0
27. Zinc Sheets	"	0 8 0	0 1 0
28. Copper, Zinc, Spelter, Tin in Tiles or Steel	"	0 8 0	0 1 0
29. Indigo	"	0 8 0	0 2 0
30. Mother-of-Pearl Shells	"	0 8 0	0 2 0
31. Myrabollams (gallnuts)	"	0 5 0	0 0 8
32. Oil Coconut	"	0 8 0	0 1 6
33. Oil Seeds	"	0 5 0	0 0 8
34. Opium	Chest	0 4 0	0 4 0
35. Pepper, in bales and cases	Pkg.	0 3 0	0 0 6
36. Paints	Ton	0 8 0	0 1 0
37. Pepper	"	0 6 0	0 1 6
38. Piece-Goods	Bale	0 2 0	0 0 5
39. Sandal and Sapan wood	Ton	0 8 0	0 2 0
40. Senna Leaves	"	0 6 0	0 1 0
41. Sharkfins and Fishmaws	"	0 8 0	0 4 0
42. Shawls	Pkg.	0 4 0	0 4 0
43. Sugar	Ton	0 6 0	0 0 8
44. Spices, except Cardamoms	"	0 8 0	0 1 0
45. Tea	Chest	0 1 0	0 0 3
46. Tin Plates	Ton	0 8 0	0 0 6
47. Tobacco	Case		
48. Turmeric	Ton	0 6 0	0 1 0
49. Twist and Yarn	Bale	0 2 0	0 0 5
50. Wool	"	0 2 0	0 0 6
Goods not enumerated if charged by measurement	C. ft.	0 0 3	0 0 1
Do. by weight	Ton	0 8 0	0 1 0

* Open air accommodation ; should shed accommodation be required, the rent will be 8 pices per ton.

All goods weighed and re-stored by the Warehouse Department will be charged one-half of the original storage and delivery charge.

The storage and delivery charge will cover cost of moving goods from transit shed to the warehouse, or from the warehouse to the transit shed.

Loading or unloading of carts will be charged for as follows :—

Loading or unloading packages up to 2 cwts., 1 anna per cart.

Loading packages over 2 cwts., at rates to be arranged with Traffic Manager.

Unloading packages over 2 cwts., at rates to be arranged with Traffic Manager.

Loading and unloading together, 1½ anna per cart, packages up to 2 cwts.

The Traffic Manager to have the option of allowing merchants to load or unload their carts.

Weightment of goods will be charged for at 3 annas per ton.

Warrant are issued for goods stored in the Bonded Warehouse in the Fort.

By order of the Trustees,

JOHN RYAN,
Traffic Manager, Bombay Port Trust.

BOMBAY PORT TRUST.

SCALE OF WHARFAGE, CRANAGE AND OTHER FEES
TO BE CHARGED AT PORT TRUST BUNDERS.

Sanctioned by the Government of Bombay under Sec. 43, "Bombay Port Trust Act, 1879," on the 15th day of November, 1879.

No. of Item.	Description of Goods.	How charged.	Wharfage Fee.		
			Rs.	a.	p.
1	Acids	Case	0	4	0
2	Aërated waters	One doz.	0	0	3
3	Akroots (walnuts)	Package	Measurement		
4	Ale, beer, porter and cider, in wood... ..	Hogshead	0	4	0
5	Do. do.	Kilderkins	0	2	0
6	Do. do.	Firkins	0	1	3
7	Do. do. in bottles.	1 doz. qts. or 2 doz. pints	0	0	6
8	Alkali (sajekar)	Ton	0	12	0
9	Almonds	"	0	12	0
10	Aloes, black	"	0	12	0
11	Alum (fatki)	"	0	12	0
12	Ambasee (dried mango)	"	0	12	0
13	* Anchors, grapnels, &c., English.	"	0	8	0
14	Do. do. country.	Coolie-load	0	0	6
15	Animals—see Live Stock.				
16	Antimony (soorma)	Ton	0	12	0
17	Apparel, not accompanying passengers	Package	0	2	0
18	Arrowroot, country	Ton	0	12	0
19	Do. foreign	Case or package	Measurement		
20	Arsenic	Package	Do.		
21	* Asphalte	Ton	0	8	0
22	Assafoetida in bulk (hing), fine	"	2	8	0
23	Do. do.	Case or package	0	4	0
24	Do. course (Hingola)	Ton	0	12	0
25	Bagatelle tables	Each	2	0	0
26	* Ballast stones	Boat under 25 tons burden	1	0	0
27	* Do.	Boat over 25 and up to 50 tons	2	0	0
28	* Do.	Boat over 50 tons burden	2	8	0
29	* Bamboos	Regd. ton of vessel	0	4	0
30	* Do. tokers by raft	One hundred	1	0	0
31	* Do. and tokers	Cart-load	0	4	0
32	Bamboo blinds, in bundles	Regd. ton of vessel	0	4	0
33	Do. do.	One hundred bundles	1	0	0
34	Do. do.	Cart-load	0	4	0
35	Bangles, Country	Package	0	1	0
36	Do. do.	Cart-load	0	6	0
37	Do. foreign	Case	0	2	0

No. of Item.	Description of Goods.	How charged.	Wharfage Fee.
			Rs. a. p.
38	Bardans (old gunnies)...	Bundle or package	0 1 0
39	* Bark, shemby ...	Regd. ton of vessel	0 6 0
40	* Do. of sorts ...	• Ton	0 12 0
41	* Baskets, cane ...	One dozen	0 0 6
42	* Do. bamboo and mat ...	„	0 0 3
43	Beads, in bags ...	Bag	0 2 0
44	Do. in cases ...	Case	0 2 0
45	Bedsteads, country ...	Each	0 2 0
46	Beef or pork ...	Tierce	0 4 0
47	Do. do. ...	Barrel	0 2 0
48	Bees' wax ...	Package	0 2 0
49	Betelnut ...	Ton	0 9 0
50	Betel leaves ...	Package	0 0 6
51	Do. do. ...	Cart-load	0 4 0
52	Bhang ...	Ton	1 4 0
53	Bhat (paddy) ...	Candy of 20 furrals	0 3 0
54	Biscuit, ship ...	Ton	0 12 0
55	Do. in cases ...	Case	Measurement
56	Do. in tins ...	One dozen	0 3 0
57	Billiard Tables ...	Each	5 0 0
58	Blood stones ...	Case or package	0 2 0
59	* Boats (hodies) ...	Each	0 4 0
60	* Boats, jolly ...	„	0 8 0
61	* Boats, muchwas and bullovs.	„	0 8 0
62	Boilers ...	See special rates	at pp. 70 & 91
63	* Bones ...	Ton	0 9 0
64	Books ...	Case	Measurement
65	Boots and shoes, English	Do.	
66	Do. do. country	Bundle or package	0 1 0
67	Borax (unrefined) ...	Ton	0 12 0
68	* Bottles, empty ...	Crate, cask or case	0 2 0
69	* Do. do. loose ...	Cart-load	0 3 0
70	* Do. do. ...	Coolie-load	0 0 6
71	* Boxes, country, empty	One dozen	0 4 0
72	* Do. unmade, from Malabar Coast ...	Regd. ton. of cargo boat	0 4 0
73	* Do. do. ...	Cart-load	0 4 0
74	Do. horse and cattle, empty ...	Each	0 8 0
75	Bran ...	Candy of 8 furrals or 2½ Cwts.	0 1 0
76	Brass leaves—see Orsidue.		
77	Brass of sorts, and ware ...	Ton	0 8 0
78	Do. do. when no weight is given ...	Package	Measurement
79	Bricks, bath ...	Case	0 1 0
80	* Do. country ...	Regd. ton of vessel	0 4 0
81	* Do. do. ...	Cart-load	0 2 0
82	* Do. foreign ...	Per thousand	1 8 0
83	Brooms ...	One hundred	0 0 6
84	Bullion, specie, gold and silver-ware and coins, plate, &c. ...	Box or package	0 4 0
85	Burroo (country pens) ...	Package of 6 c. ft. and under	0 1 0
86	Do. do. ...	Package over 6 c. ft.	0 2 0
87	* Casks and hogsheds	Each	0 1 0
88	* Casks and hogsheds, half and quarter ...	„	0 0 6

No. of Item	Description of Goods.	How charged.	Wharfage Fee.		
			Rs.	a.	p.
89	* Cables, chain	Ton	0	8	0
90	* Do. hemp	"	0	12	0
91	* Cadjans	Regd. ton of vessel	0	4	0
92	* Do.	Cart-load	0	4	0
93	Cajoo or cachewnuts	Package	0	2	0
94	Cambay stones	Case or package	0	2	0
95	Camphor	Ton	1	4	0
96	Candles	Cwt.	0	2	0
97	Canes—see Rattans.				
98	Canvas	Bale	0	3	0
99	Do.	Bolt	0	0	6
100	Camphor-wood drawers	Each piece	0	4	0
101	Capoor cutchree	Ton	0	12	0
102	Cardamoms	Cwt.	0	2	0
103	Do. bastard—see Spices.				
104	Carpets, country	Case or package	0	1	0
105	Do. foreign	"	0	4	0
106	* Carriages, four-wheeled	Each	4	0	0
107	* Do. two-wheeled	"	3	0	0
108	* Carts, country	"	0	8	0
109	* Cart wheels	Pair	0	4	0
110	Cassa ware, white metal	Ton	0	8	0
111	Catechu	Package of 4 c. ft. and under	0	0	6
112	Do.	Package over 4 c. ft.	0	1	0
113	Cement	Ton	0	8	0
114	Chairs, in bundles	Bundle	0	1	0
115	Chairs, loose	Each	0	0	6
116	Chalk	Ton	0	6	0
117	Charcoal	Regd. ton. of vessel	0	4	0
118	* Charpoys	Each	0	1	0
119	Cheese, in cases	Case	Measurement.		
120	Do. loose	Each			
121	Chemicals—see Drugs and Medicines.		0	0	3
122	Cheroots and Cigars	Case	Measurement		
123	Chillies, dried	Ton			
124	* Chillims, for hookas	One thousand	0	1	0
125	China copper cash	Ton	0	8	0
126	China flower pots	Each	0	0	6
127	Do. garden seats	"	0	2	0
128	Do. Preserves and Chowchow	Case of ½ dozen and under	0	1	0
129	Do. do.	Case of over ½ doz.	0	2	0
130	Do. do.	Jar or pot	0	0	3
131	Do. roots	Ton	0	12	0
132	Do. and Japan fancy goods	Case	Measurement		
133	Do. ware in rolls, large	One doz.			
134	Do. do. small	"	0	1	6
135	Do. white copper ware	Case	0	3	0
136	Chooney	Candy of 8 furrahs or 9 Indian mds.	0	2	0
137	* Chunam, loose	Regd. ton. of vessel	0	4	0
138	* Do. in packages	Ton	0	8	0
139	* Do. stones	"	0	4	0
140	* Clay, China and fire	"	0	8	0
141	* Do. country	Regd. ton. of vessel	0	3	0
142	Clay figures	Case.	0	2	0

No. of Item.	Description of Goods.	How charged.	Wharfage Fee.
			Rs. a. p.
143	Clocks... ..	Case of 8 c. ft. and over	0 8 0
144	Do.	Case of under 8 c. ft.	0 4 0
145	* Coal, coke, cinders, patent fuel and ashes	Ton	0 2 0
146	Do. do. do.	Cart-load	0 2 0
147	* Coal shoots	Each	0 4 0
148	Cocoanuts when numbers are declared	Per Thousand	0 2 6
149	Cocoanuts when numbers are not declared	Per Package	0 1 0
150	Cochineal	Cwt.	0 2 0
151	Cocum	Ton	0 12 0
152	Do. oil	Case or pot	0 4 0
153	Coffee	Ton	0 12 0
154	Do. dross	"	0 6 0
155	Coins, copper	Box or package	0 1 0
156	Coir fibre	Ton	0 9 0
157	Do. pressed	Bale	0 1 6
158	Do. rope, cable, cordage, and yarn	Ton	0 9 0
159	Colombo root	"	0 12 0
160	Confectionery	Case	Measurement
161	* Coojas or goblets, Muscat	One hundred "	0 4 0
162	* Do. do. Goa, com-mon	"	0 2 0
163	Coormoora (parched rice)	Package	0 0 6
164	Coosoomba—see Safflower.		
165	* Copper, in sheets, slabs, or tiles	Ton	0 8 0
166	Do. ware and wire	"	0 8 0
167	Do. when no weight is given	Package	Measurement
168	Copperas	Ton	0 12 0
169	Copra	"	0 9 0
170	Coral	Package or box	0 8 0
171	Do. imitation	Case	Measurement
172	Cordage and hawsers, hemp, Europe and Manilla... ..	Ton	0 12 0
173	Coriander seed	"	0 9 0
174	Corks	Bale or case	Measurement
175	Cotton, raw, pressed	Bale	0 1 0
176	Do. unpressed	Bale or docra of over 3 cwts.	0 1 0
177	Do. do.	Do. under 3 cwts.	0 0 6
178	* Cotton screw-jacks	Each	0 0 6
179	Couches and sofas	"	0 2 0
180	Cowries	Ton	0 12 0
181	Crackers, China	Case of one picul of 133 lbs.	0 2 0
182	Do. do.	Case under one picul	0 1 0
183	Crockery, porcelain, and earthenware	Crate or hogshead	Measurement
184	Croton seed (jamalgotee)	Ton	0 12 0
185	Cummin seed	"	1 4 0
186	Cuppas (mat bags)	One hundred	0 4 0
187	Do.	Coolie-load	0 0 6
188	Cutlery	Case	Measurement

No. of Item.	Description of Goods.	How charged.	Wharfage Fee.		
			Rs.	a.	p.
189	Dammer	Ton	0	9	0
190	Dates, dry	"	0	9	0
191	Do. wet	"	0	9	0
192	Do. in pots	One doz. pots.	0	4	0
193	* Dhooleakar (country soda earth)	Regd. ton. of vessel	0	6	0
194	Do. part cargo and in bags	Ton	0	9	0
195	Dhowri flowers	"	0	12	0
196	* Dinner cups (leaves)...	Fifteen "hundred	0	0	3
197	* Do. leaves	"	0	0	3
198	Dishes, wooden, large ..	Score	0	1	0
199	Do. do. small	"	0	0	6
200	* Disinfecting powder...	Ton	0	8	0
201	Dragon's blood	Case	0	2	0
202	Drugs and medicines, foreign, not enumerated	Case or package	Measurement		
203	Do. do. country	Bag	0	1	0
204	Drums, dubbers and dubbas	One hundred	0	12	0
205	Dyes, country, not enumerated.	Ton	0	12	0
206	Do. foreign	Case or package	Measurement		
207	Earthen retorts and piping for drainage	Ton	0	12	0
208	Earthen ware, foreign—see Crockery.				
209	* Earthenware, country, by cargo boats and coasting vessels	Regd. ton. of vessel	0	3	0
210	* Eggs... ..	Basket or pot	0	0	6
211	Elephants' tusks and Moyes teeth—see Ivory.				
212	Engines, garden	Each	0	4	0
213	Fans	Case	0	2	0
214	Fat, grease, lard and tallow	Ton	0	12	0
215	Feathers	Case or package	0	2	0
216	Felt	Bale	Measurement		
217	* Firewood	Regd. ton. of vessel	0	4	0
218	* Do.	Cart-load	0	2	6
219	* Fish, fresh	Mutchwa or bullock per month	2	0	0
220	* Do. 'do.	Hody per month	1	0	0
221	* Do. do.	Boat manned by 2 men	0	8	0
222	Fish, salted and dried, in packages...	Ton	0	12	0
223	Do. do. loose	Regd. ton. of vessel	0	8	0
224	Do. do.	Cart-load	0	4	0
225	Fish, tamarind	Keg	0	1	0
226	Fish-maws	Ton	1	4	0
227	Fishing nets, new	Each	0	2	0
228	Do. tackle	Case	0	2	0
229	Fish, roe	Pot or package	0	1	0
230	Flax	Bale	0	2	0
231	Flour	Ton	0	12	0
232	Flour in barrels, no weight given	Barrel	0	1	0
233	* Fruits, fresh, foreign ...	Case	0	1	0
234	* Do. do.	Barrel	0	1	6

No. of Item.	Description of Goods.	How charged.	Wharfage Fee.		
			Rs.	a.	p.
235	* Fruits, from Zanzibar and Muscat... ..	Basket	0	0	6
236	* Do. from Cabul	Large basket or jambil	0	6	0
237	* Fruits, fresh, country	Regd. ton. of vessel	0	4	0
238	* Do. do. part cargo	Cart-load	0	3	0
239	* Do. country	Coolie-load	0	0	6
240	Fruits, dry, not enumerated	Ton	0	12	0
241	Do. from Europe	Case	Measurement		
242	Furniture, not accompanying passengers	"	Do.		
243	Gallnuts—see Myrabollams.	"	Do.		
244	Ganja (<i>cannabis indica</i>)	Ton	1	4	0
245	Garlic	"	0	12	0
246	Ghee	"	1	0	0
247	Ginger, dry (Soonth)	"	0	12	0
248	* Do. green	Regd. ton. of vessel	0	4	0
249	* Do. do. part cargo	Cart-load	0	3	0
250	Glass-ware	Hogshead	Measurement		
251	Glass, window	Box	0	1	0
252	* Do. broken	Package	0	1	0
253	Glue	Ton	1	0	0
254	Goat's hair, loose, in bundles	Bundle or package	0	0	6
255	Do. do. pressed	Bale	0	1	0
256	Gold leaf—see Bullion.	"			
257	Do. mock	Box or package	0	1	0
258	Gold and silver lace or jury	"	0	4	0
259	Grain of all kinds, loose and in bags... ..	"			
		Per ton of 3 candies			
		8 furrals or 9 Indian Maunds			
		to candy	0	6	0
260	* Grass, Green	Regd. ton. of vessel	0	4	0
261	* Do.	Cart-load	0	2	0
262	Grass-oil	Case or Pot	0	4	0
263	Grinding-stones, country	Pair	0	0	6
264	Groundnuts	Ton	0	6	0
265	Gums of kinds, not enumerated.	"	1	0	0
266	Gunny pieces and bags	Bale	0	4	0
267	Do. do.	Half bale	0	2	0
268	Do. do.	Bundle of 50 pieces	0	1	0
269	Gunpowder	See special rates at page 33.	...		
270	Guns, large, cannons, howitzers, &c.—see Military Stores and Arms.	"			
271	Do. small rifles and fowling pieces, but not including military arms and equipment	Case	0	4	0
272	Do. do. pistols, revolvers, &c.	"	0	2	0
273	Haberdashery, millinery and hosiery	"	Measurement		
274	Hams, in cases	"	Measurement		
275	* Do. loose	Each	0	0	3
276	* Hardware	Ton	0	12	0
277	Do. when no weight is given	Package	Measurement		
278	Harmoniums	Each	1	0	0

No. of H.	Description of Goods.	How charged.	Wharfage Fee.		
			Rs. a. p.		
279	Harness and harness requisites ...	Case	Measurement		
280	Hats and Caps—see Haberdashery and Millinery.				
281	* Hay and straw ...	Regd. ton. of vessel	0	4	0
282	* Do. pressed ..	Bale	0	0	6
283	* Do. in bundles ...	Cart-load	0	2	0
284	Hemp, loose, in bundles ..	Ton	0	9	0
285	Do. pressed ...	Bale	0	1	0
286	Hessians ...	"	0	3	0
287	* Hides, buffalo, &c. ...	One hundred	0	8	0
288	Honey ...	Package or pot	0	1	0
289	Hookas (cocoanut shells) ...	Package	0	1	0
290	Horns, buffalo, bullock and deer ...	Ton	0	12	0
291	Hulwa, in plates ...	Doz. Plates	0	1	0
292	Do. in jambils ...	Doz. Jambils	0	0	6
293	* Husk or chaff for burning bricks ...	Regd. ton. of vessel	0	2	0
294	Do. for animals ...	Candy of 8 furrals or 2½ cwt.	0	1	0
295	Ice (small quantities for daily consumption on board to pass free) ..	Ton	0	8	0
296	Incense—see Olibanum.				
297	Indian condiments ...	Case	Measurement		
298	Indigo ..	Ton	1	0	0
299	Ink ...	Case	0	3	0
300	Do. ...	Cask	0	4	0
301	Instruments, drawing, mathematical, musical and others not enumerated ...	Case or Package	Measurement		
302	Ironmongery ...	Ton	0	12	0
303	Do. when no weight is given ...	Case	Measurement		
304	* Iron, bar, hoop, pig, rod, scrap sheets, bands, angle, T. and old and steel, hoop ..	Ton	0	6	0
305	* Iron, other than the foregoing, including girders, casting pipes, &c. ...	"	0	8	0
306	Ivory and Elephant tusks ..	Cwt.	0	2	0
307	Do. ware ...	Package	0	4	0
308	Jaggery ...	Ton	0	9	0
309	Jars, fancy, large, China and Japan ...	Each	0	1	0
310	Do. Common, large ...	One hundred	2	0	0
311	Do. do. small ...	"	1	0	0
312	Jewellery and trinkets ..	Box or package	0	8	0
313	Do. do. imitation ..	Case or package	0	2	0
314	Jute, raw, loose ...	Ton	0	9	0
315	Do. pressed ...	Bale	0	1	0
316	Kegs ...	One doz.	0	2	0
317	Khootwood ...	Ton	0	12	0
318	Kuskus for tatees ...	Package	0	1	0
319	Kerosine oil ...	Case of 10 gals.	0	0	6
320	Lac ...	Ton	1	0	0
321	Lac-dye ...	Package	0	2	0
322	Lavender flowers ...	Do.	0	1	0

No. of Item.	Description of Goods.	How charged.	Wharfage Fee.		
			Rs.	a.	p.
323	Lanterns, country ...	One doz.	0	0	6
324	Lead, pig, piping, sheets, and rolls ...	Ton	0	8	0
325	Do. black, white, and red ...	Do.	0	12	0
326	Do. shot ...	Do.	0	12	0
327	Leather, country ...	Bundle of 25	0	2	0
328	Do. foreign ...	Case or Package	Measurement		
329	Liquorice-root ...	Ton	0	12	0
330	Liquors, foreign and country —see Spirits.				
	* Live stock—				
331	Horses* ...	Each	0	8	0
332	Cows and buffaloes. ...	Do.	0	4	0
333	Calves and pigs ...	Do.	0	2	0
334	Goats and sheep ...	Do.	0	1	0
335	Do. do. ...	Per 100	1	8	0
336	Dogs and monkeys ...	Each	0	1	0
337	Turkeys and geese ...	One doz.	0	2	0
338	Fowls and ducks ...	"	0	1	6
339	Tigers, bears, and other wild animals ...	Each	2	0	0
340	Luggage of European sailors, ship captains, naval officers, members of the water police and preventive officers, while proceeding on or off duty on board ...	Free	...		
341	* Passengers' Luggage ...	Free	...		
342	Do. brought by native coolies ...	Free	...		
343	Madder or Munjeet ...	Ton	0	12	0
344	* Marble and marble slabs ...	"	0	12	0
345	Marking nuts (bellama) ...	Package	Measurement		
346	* Masts of mutchwas and padows ...	Each	0	1	0
347	* Do. of buggalows, cottias and pattimars ...	"	0	2	0
348	Matches, English ...	Case	Measurement		
349	Do. country (Dewasali) ...	Bundle	0	0	6
350	Mats of sorts, foreign ...	Package of 50	0	2	0
351	Mats, country ...	Package of 100	0	2	0
352	Do. cane ...	Roll of 25	0	2	0
353	* Machinery ...	See special rates at pp. 70 & 91			
354	Matting, Coir ...	Package	0	1	0
355	Do. rolls of coir carpet ...	"	0	2	0
356	Medicine—see Drugs.				
357	Metals, not enumerated ...	Ton	0	8	0
358	* Mill and foundation stones ...	"	0	8	0
359	Millinery—see Haberdashery.				
360	Mollasses and treacle ...	"	0	12	0
361	Mother-o'-pearl shells ...	"	1	0	0
362	Military stores, arms, equipment ...	"	0	12	0
363	Military stores, when weight is given ...	Case	Measurement		
364	Mineral waters ...	Case or Cask	0	1	0
365	Mowra and mowra flowers ...	Ton	0	6	0

* When horses are landed or shipped in boxes wharfage and cranage should be charged only on the horses.

No. of Item.	Description of Goosd.	How charged.	Wharfage Fee.		
			Rs.	a.	p.
366	Myrabollams	Ton	0	6	0
367	Myrrh	"	1	4	0
368	Nails of sorts	"	0	8	0
369	Naptha	Case of 10 gals.	0	1	0
370	Nowsagur—see Salammoniac.				
371	Nux vomica	Ton	0	12	0
372	Oars, country	One doz.	0	1	0
373	Ochre of kinds	Ton	0	8	0
374	Oils, linseed, castor, and other vegetable	Tin or drum up to 10 gals.	0	1	0
375	Do. do. do.	Ton	0	12	0
376	Do. perfumed, of sorts	Case or pot	0	4	0
377	Oil-cake	Ton	0	9	0
378	Oilman's Stores	Case	Measurement		
379	Olibanum	Ton	1	4	0
380	Opium	Chest of 140 lbs.	1	0	0
381	Do.	Half chest	0	8	0
382	Orsidue or brass leaves	Package	0	0	6
383	Overland post parcels	Each	0	0	6
384	Paints, oil	Ton	0	12	0
385	Palanquins and doolies	Each	0	8	0
386	Paper of kinds	Bale	0	2	0
387	Papudkhar (country soda)	Ton	0	9	0
388	Paraffine and petroleum—see Kerosine.				
389	Patch leaves	Case	0	2	0
390	Pearls	Box or package	0	8	0
391	Do. imitation	"	0	2	0
392	Pepper of kinds and pepper Roots	Ton	1	4	0
393	Perfumery, hair oils, pomades, &c., unenumerated	Case	Measurement		
394	Pianofortes	Each	2	0	0
395	Piece-goods, cotton	Bale	0	2	0
396	Do. silk and velvets	"	0	6	0
397	Do. cotton and silk large bales	"	0	6	0
398	Do. and woollens	"	0	2	0
399	Pipes, clay, smoking, common.	Case	0	1	0
400	Pistachionuts	Ton	1	0	0
401	Pitch	Ton	0	12	0
402	Plants, shrubs, and trees	Cart-load	0	4	0
403	Do. do.	Coolie-load	0	0	6
404	Platedware—see Bullion.				
405	Plums—see Dry Fruits.				
406	Porcelain—see Crockeryware.				
407	Poultry and Birds—see Live Stock.				
408	Powa	Package	0	0	6
409	Precious stones	Box or package	0	8	0
410	Provisions, fresh, for daily use on board	Free	0	1	0
411	Provisions, fresh, for voyage	Coolie-load	0	12	0
412	Pudwas	Ton	0	12	0
413	Quicksilver	Bottle	0	2	0
414	Railway Plant and materials	See special rates at pp. 70 & 91			
415	Rafters—see Timber.				
416	Rags	Bale or package	0	1	0
417	* Rattans	Ton	0	12	0

No. of Item.	Description of Goods.	How charged.	Wharfage Fee.		
			Rs.	a.	p.
418	* Rattans, Malacca	One doz.	0	1	0
419	* Reeds	Bundle	0	0	6
420	* Do.	Cart-load	0	4	0
421	* Road metal	Regd. ton of vessel	0	2	0
422	Rose flowers, dried	Ton	0	12	0
423	Rose-water	Case	0	1	6
424	Do.	Carboy	0	0	6
425	Rosin	Ton	0	12	0
426	Safflower (Coosoomba)... ..	"	1	0	0
427	Saddlery—see Harness and Har- ness Requisites.				
428	Sago		0	12	0
429	Do.	Case or package	Measurement		
430	* Sails, of buggalows, cotias, and pattimars	Each	0	4	0
431	* Do. of padows	"	0	2	0
432	* Do. of mutchwas	"	0	1	0
433	Sailuñ-misree	Ton	2	8	0
434	Salammoniac	"	0	12	0
435	* Salt, country	Regd. ton of vessel	0	4	0
436	Saltpetre	Ton	0	12	0
437	Samada stones	"	0	12	0
438	Samples and trusses	Parcel	0	1	0
439	Do. do.	Case	Measurement		
440	* Sand deposited on wharf	Ton	0	2	0
441	* Do. do. on hard	"	0	1	6
442	Sandalwood	"	1	0	0
443	Do. boxes and ware	Package	0	2	0
444	Sapanwood	Ton	0	10	0
445	Scinde work	Case or package	0	2	0
446	Seeds—oil, linseed, teel, castor, rape, mustard, niger, poppy, &c.	Ton	0	8	0
447	Seeds, other than oil seeds, not enumerated	"	0	12	0
448	Senna leaves	"	0	12	0
449	Shark-fins	"	1	4	0
450	Sawjeera	"	0	12	0
451	Shawls, Cashmere and Delhi	Case or package	0	8	0
452	Do. Europe	"	Measurement		
453	Shells, in cases, unenumerat- ed	"	0	2	0
454	Do. loose and in bags, un- enumerated	Ton	0	12	0
455	Shellac	"	1	0	0
456	Shikakai	"	0	12	0
457	Shooks, barrel... ..	Each barrel	0	0	6
458	Silk, raw	Case or bale	0	4	0
459	*Skins, goat and sheep, tanned.	Case or bale	0	2	0
460	* Do. do. untanned	Bundle	0	1	0
461	Soap, perfumed, foreign	Case	Measurement		
462	Do. bar do.	Do.			
463	Do. country, bar and soft	Ton	0	12	0
464	Soapnuts	"	0	12	0
465	Soda, foreign	Case	0	2	0
466	Do. country—see Papudkhar.				
467	Supras (winnowing fans)	One hundred	0	2	0
468	Soorungy	Ton	0	12	0
469	*Spelter and solder	"	0	8	0

No. of Item.	Description of Goods.	How charged.	Wharfage Fee.		
			Rs.	a.	p.
470	Spices—cinnamon, mace, cloves, nutmegs, bastard cardamoms and others unenumerated (for cardamoms, <i>see</i> Special Rate).	Ton	0	12	0
471	Spirits and wines, foreign, in wood	Per Imp. gal.	0	0	2
472	Do. do. ... do. in bottles	1 doz. qts. or 2 doz. pints	0	1	0
473	Do. country	Three Imp. gals.,	0	0	2
474	Do. beer, porter, &c.— <i>see</i> Ale.				
475	Stationery, unenumerated ...	Case	Measurement Do.		
476	Do. do. ...	Cask			
477	Staves, barrel— <i>see</i> Shooks.				
478	* Steel	Ton	0	8	0
479	* Stones, ballast— <i>see</i> Ballast.				
480	* Do. laddy, paving and sand dressed. ...	Regd. ton. of vessel	0	4	0
481	* Do. do. do. ...	Cart-load	0	4	0
482	* Do. do. do. ...				
483	undressed and rough rollers of, large ...	Ton	0	2	0
484	* Do. do. small ...	Each	0	4	0
485	* Stoneware, country ...		0	2	0
486	* Do. do. ...	Cart-load	0	6	0
487	* Stores, old, marine ...	Package	0	1	0
488	* Suffrys for making mat bags..	Cart-load	0	4	0
489	Sugar and Sugarcandy		0	4	0
490	Sugar, loaf ...	"Ton	0	12	0
491	* Sugarcane ...	Case	0	2	0
492	* Do. ...	Regd. ton. of vessel	0	4	0
493	Sulphur ...	Cart-load	0	3	0
494	Sweetmeat, native ...	Ton	0	12	0
495	Do. ...	Case or package	0	2	0
496	Syrup and sherbet ...	Pot or basket	0	0	6
497	Tallow— <i>see</i> Fat.	Case	0	2	0
498	* Tamarind, raw and green ..				
499	Do. do. ...	Regd. ton. of vessel	0	4	0
500	Do. preserved (ambli) ..	Cart-load	0	3	0
501	Tar ...	Ton	0	12	0
502	Tea ...		0	12	0
503	Do. ...	Chest of 60 lbs.	0	2	0
504	Do. ...	Half chest	0	1	0
505	* Tents, double-poled... ..	Pkg. below half chest	0	0	6
506	* Do. single-poled	Each	1	0	0
507	* Do. rowtees		0	8	0
508	* Do. beechobas	"	0	4	0
509	* Tiles, country.	"	0	2	0
510	* Do. do.	Regd. ton. of vessel	0	4	0
511	Do. flooring, packed. ...	Cart-load	0	2	0
512	* Do. foreign and Mangalore.	Ton	0	12	0
513	* Timber, blackwood, ebony, teak and pine, in logs, squares, planks, and scantlings	Regd. ton. of vessel	0	4	0
514	* Do. bhendy, jungle, and rafters.	Ton of 50 c. ft.	0	8	0
515	* Do. rafters, by raft ...	Regd. ton. of vessel	0	6	0
516	* Tin, of kinds	Cart-load	0	4	0
		Ton	0	8	0

* On Timber removed from one basin to another on the foreshore no export wharfage fee will be charged.

No. of Item.	Description of Goods.	How charged.	Wharfage Fee.
517	Tin plates	Case	Rs. a. p. 0 0 6
518	Tobacco, country, in leaf, un- manufactured	Bale	Measurement
519	Tobacco, foreign, manufactur- ed, but not cheroots	Case	0 2 0
520	Tortoise shell	"	0 4 0
521	Toys	"	Measurement
522	Trunks and boxes, country, empty	Of 6 c. ft. and under, each	0 0 6
523	Do. do.	Of over 6 c. ft., each	0 1 0
524	Do. foreign	Each	0 2 0
525	Do. camphor-wood drawers	Each piece	0 4 0
526	Turmeric	Ton	0 12 0
527	Turpentine	Case of 10 gals.	0 1 0
528	Twine, country	Ton	0 12 0
529	Twist and yarn	Bale	0 2 0
530	Umbrellas	Case or package	Measurement
531	Varnish	Case of 5 gals.	0 1 0
532	* Vegetables, fresh	Regd. ton. of vessel	0 4 0
533	Do. do.	Cart-load	0 3 0
534	* Do. do.	Coolie load	0 0 6
535	Vermilion	Ton	0 12 0
536	Do.	Case	0 1 0
537	Vinegar, country	Hogshead	0 2 0
538	Do. do.	Pot or Carboy	0 0 6
539	Wines, liquors, &c.—see Spirits.		
540	Wire, of sorts, not enumerated.	Ton	0 12 0
541	Wire, when no weight is given.	Case	Measurement
542	Wool, Berlin—see Haberdashery.		
543	Wool, raw, up to 1½ cwt., un- pressed	{ Docra to 3 cwts.	0 2 0 0 3 0
544	Wool, raw, over 1½ cwt.	Bale or bora above 3 cwts.	0 4 0
545	Wool, pressed	Bale	0 1 0
546	Woollens—see Piece Goods.		
547	* Walnuts—see Akroots.		
548	Watches, gold and silver	Case	0 8 0
549	Do. other than above	"	0 4 0
550	Whiting	Ton	0 8 0
551	* Yellow metal, sheets	"	0 8 0
552	* Zinc sheeting	"	0 8 0
<i>Charges for measurement.</i>			
On all Goods not enumerated, if in cases, bales, crates or casks, and on all goods specified to be charged for by measure- ment, the rates will be :—			
553	If under 4 cubic feet	Package	0 1 0
554	If of 4 and under 6 cubic feet	"	0 2 0
555	If of 6 and under 10 cubic feet	"	0 2 6
556	If of 10 and under 15 cubic feet	"	0 3 0
557	If of 15 and under 20 cubic feet	"	0 4 0
558	If of 20 and under 30 cubic feet	"	0 6 0
559	If of 30 and under 40 cubic feet	"	0 7 0
560	If of 40 and under 50 cubic feet	"	0 8 0
561	If of 50 and under 60 cubic feet	"	0 10 0
562	If of over 60 cubic feet	"	0 12 0

No of Item.	Description of Goods.	How charged.	Wharfage Fee.		
			Rs.	a.	p.
563	On all goods not enumerated, chargeable by weight, the rate will be :—	Ton	0	12	0
564	All description of packages of goods rated in this table of fees, excepting gold leaf, bullion, plate, gold and silver watches, ivory, jewellery, opium, perfumed oils, corals, pearls, precious stones, if measuring under 3 c. feet, will be charged ...		0	1	0
565	Provisions and furniture for pic-nic and excursion parties, will be allowed to pass free.	Package			
566	Four annas will be levied for each duplicate chuppa or receipt issued.				
567	Four registered candies are to be considered equal to one ton, and in grain, &c., 3 candies of 9 Indian maunds each.				

Tonnage Fees and Basin Rents.

1. Cargo boats and barges coming alongside the Port Trust wharves or into the Port Trust basins for discharging or receiving, will be charged :—

		Rs.	a.	p.
Cargo boats up to 20 tons each	 per month	0	4	0
Do. over 20 tons and up to 30 tons each	 "	0	8	0
Do. over 30 tons each	 "	1	0	0
Barges up to 60 tons each	 "	2	0	0
Do. over 60 tons each	 "	3	0	0
Ferry steamers each	 "	75	0	0
" per registered ton	 per day	0	1	0

2. Coasting vessels, excepting those specified in Section 4, arriving at or departing from any of the Port Trust wharves or basins, will be charged per registered ton Rs. 0-1-0.

3. Coasting vessels, with the exception of those shown in the following section, will be allowed to remain at the wharves or in the basins for the purpose of discharging or loading 7 days free of rent ; after that time they will be charged as under, in addition to the one anna per ton as per preceding section :—

		Rs.	a.	p.
If under 20 tons each	 per day	0	8	0
If over 20 and up to 30 tons	 "	0	12	0
If over 30 and up to 40 tons	 "	1	8	0
If over 40 tons	 "	2	0	0

4. Vessels arriving at any of the Port Trust Bunders from the under-mentioned ports, or from any ports lying within the line of Kennery Island and to the south of Kaylan, Bhiwandi, or leaving the Port Trust Bunders for the same ports, will be charged half the above rates shown in Sections 2 and 3, but will only be allowed 5 free days :—

Antora, Kaylan, Karanja, Nagotna, Urun, Rewas, Thullajah, Belapur

Chimbur, Mowel, Nowasewa, Pen, Thana, Thull, Bhiwandi, Dharamtar, Mandva, Oolva, Panvel, Trombay.

5. Cargo boats and barges lying alongside any Port Trust wharf, and not discharging freely within 48 hours, will be charged :—

		Rs. a. p.
Cargo boats and barges from 10 to 25 tons each	per day	0 4 0
Do. ... over 25 and up to 50 tons	"	0 8 0
Do. ... over 50 tons	"	1 0 0

6. Cargo boats, barges, and coasting vessels lying empty in the Port Trust basins or alongside the wharves will be charged :—

		Rs. a. p.
Barges, each	per day	0 8 0
Cargo boats	"	0 4 0
Much was and jolly boats	"	0 2 0
Hodies	"	0 1 0

7. Boats engaged in landing and embarking passengers, to include the privilege of carrying cargo to and from the Bunders, will be charged :—

		Rs. a. p.
Steam launches	Each per month	3 0 0
Jolly boats, bunder boats, dingees and much was	" "	1 0 0
Cargo boats	" "	1 8 0
Bullows	" "	1 8 0
Hodies	" "	0 8 0
Ships', Customs, Water Police, and Government boats	" "	free
Yachts, Dubashes', Stevedores', Doctors', and Surveyors', boats	" "	free

Hard Fees.

8. Vessels using the Hards south of Tank Bunder for oiling and repairing will be charged :—

		First day.	Each Succeeding day.
		Rs. a. p.	Rs. a. p.
Bumboats and jolly boats	Each	0 6 0	0 2 0
Tonies	"	0 3 0	0 1 6
Boats, from 10 to 15 tons	"	0 8 0	0 3 0
Do. over 15 to 25 tons	"	1 0 0	0 6 0
Do. over 25 to 100 tons	"	2 0 0	1 0 0
Do. over 100 tons	"	4 0 0	2 0 0

9. Vessels using the Hards north of the Mazagon Reclamation for oiling and repairing will be charged :—

		First day.	Each Succeeding day.
		Rs. a. p.	Rs. a. p.
Tonies	Each	0 1 0	0 0 6
Bumboats and jolly boats	"	0 2 0	0 1 0
Boats, from 5 to 15 tons	"	0 3 0	0 1 6
Do. over 15 and up to 20 tons	"	0 5 0	0 2 0
Do. over 20 and up to 30 tons	"	0 8 0	0 3 0
Do. over 30 and up to 50 tons	"	1 0 0	0 6 0
Do. over 50 and up to 100 tons	"	2 0 0	1 0 0
Do. over 100 tons	"	3 0 0	1 8 0

10. Harbour crafts and barges getting broken up on the Hards will be charged in addition to wharfage fees for materials removed per ton Rs. 0-2-0.

11. Coasting and country craft, buggalows, cottias, pattimars, and square-rigged vessels getting broken up on the Hards will be

charged, in addition to wharfage fees, for materials removed per ton Rs. 0-4-0. †

12. Vessels and timber lying on the Hards north of the Mazagon Reclamation will be charged :—

					Rs. a. p.
Pattimars and cottias, each	...	...	per mensem	2	0 0
Cargo boats and gulguts	...	...	...	1	0 0
Muchwas	...	...	...	0	8 0
Hodies	...	...	...	0	4 0
Timber, for first 12 months	...	...	per ton	0	4 0
Do. on renewal	...	...	...	0	8 0

13. Vessels lying on the Hards south of Tank Bunder will be charged double the rates in preceding section.

Cranage Fees.

14. These fees will be charged as follows :—

					Rs. a. p.
Horses, cows, and buffaloes	...	...	Each	0	8 0
Calves	...	...	...	0	4 0
Bale and box goods and other merchandise	...	...	per ton	0	4 0
up to 1½ tons, by hand crane	...	...	...	0	6 0
Do. do. by steam crane	...	...	...	0	6 0
Metals, machinery, &c., above 1½ tons to	...	...	...	0	6 0
3 tons, by hand crane	...	...	...	0	8 0
Do. do. 67 steam crane	...	...	...	0	8 0
Do. do. above 3 to 6 tons by hand crane	...	...	...	0	8 0
Do. do. above 6 tons	...	...	...	1	0 0

The above charges, when hand cranes are used, do not include labour.

15. At Tank Bunder logs of timber by derricks will be charged, per cart-load ... Rs. 0 1 0

Fees for Water.

16. Vessels coming to the Port Trust Bunders for water will be charged :—

					Rs. a. p.
Boats, small	...	...	each per trip	0	2 0
Cargo boats	...	...	...	0	4 0
Coasting vessels of 25 tons and under	...	...	...	0	8 0
Do. of over 25 and up to 40 tons	...	...	...	0	12 0
Do. of over 40 tons	...	...	...	1	0 0
Steam barges	...	...	...	0	8 0

Vessels that have paid the tonnage fees will be exempted from these charges.

Rents.

17. All goods marked with an asterisk * will be allowed to remain free of rent as under ; should they not be removed within the prescribed time, rent will be charged at the rates placed below :—

If on wharf front or roads, 48 hours	...	Rs. 30 per 500 sq. ft.
If in sheds, 3 days	...	20
If on Bunders 30 feet behind wharf, 5 days	...	15

18. Goods not marked with an asterisk—

- A. Goods subject to Imperial Duty and duty-free Piece-goods and Yarn will be allowed 7 days free of rent if stored in sheds or kept 30 feet behind the wharf front.
- B. Free goods, for which importers have to prepare Import Gate Notes, will be allowed 5 free days if in sheds or 30 feet behind the wharf.
- C. Free goods from free ports which can be passed on the

Note.—Rules 23 and 24 apply only to goods transhipped under Chapter XII. of Sea Customs Act without Import or Export documents.

Manifest will be allowed 3 days if in sheds or 30 feet behind wharf front.

- D. Goods on the wharf front will only be allowed 48 hours free of charge.

After the free days allowed in A., B., and C. have expired, extra fees will be incurred for every 3 days or part of 3 days at the rate of the wharfage fee to which the goods may be liable; and in the case of D. the extra fee will be incurred for every 48 hours or part thereof.

- Rs. a. p.
19. Scales for weighment of goods when placed on the wharf fronts in sheds or on roads will be charged on account of space occupied per scale per day ... 0 8 0
When placed on any other part of the Bunder, the charge will be per scale per day ... 0 6 0
Arrangements may be made with the Traffic Manager to have space for scales at a monthly rental.

- Rs. a. p.
20. Goods, excepting wet dates and jaggery, when re-packed on the Bunders, will be charged, per package ... 0 0 6
Do. wet dates and jaggery, per package ... 0 0 3

21. In computing the number of days for charging rents and extra fees, Sundays and such holidays as may be notified in the *Government Gazette*, as well as any days on which Imperial Duty may not be received, will be omitted.

22. Warehouse shed and ground rents not fixed, will be charged at rates to be arranged with the Traffic Manager.

Transhipment.

23. Goods transhipped in any of the Port Trust Basins will be charged half wharfage fees, if due notice of the intention to tranship be previously given.

24. Goods landed for transhipment will, if previous notice be given of the intention to tranship, be charged half wharfage fees on the landing and half wharfage fees on the re-shipment.

Shut-out Goods.

25. Goods shipped from the Port Trust Bunders, but which may be re-landed in consequence of being shut out from vessels, will be charged half wharfage fees on the re-landing, and half wharfage fees on the re-shipment.

Work at Nights and on Holidays.

26. Work at nights, on Sundays, and on the General Public Holidays, New Year's Day, Good Friday, the Queen's Birthday, and Christmas Day will be permitted on the Port Trust Bunders with the Traffic Manager's consent on payment of the following charges:—

For Sunday work, sunrise to sunset	Rs. 10
„ Half-day from sunrise to noon, or from noon to sunset	5
„ Public Holidays (whole or part day)	10
„ Night work, sunset to mid-night	5
„ „ from sunset to sunrise, or for any work between mid-night and sunrise	10

Re-packed Goods.

27. Goods shipped from the Trustees' Bunders, if subsequently re-landed for re-packing or re-pressing, will be charged half wharfage fees on the re-landing, and half wharfage fees for the re-shipment.

Vessels put back from stress of Weather.

28. Vessels that may put back through stress of weather or in distress, will, should wharfage fees on the cargoes have been paid before the vessels put to sea, be permitted to re-land and re-ship goods, if necessary, on the same terms as goods for transhipment.

Outlying Bunders.

29. Goods landed and shipped at the Chaupati, Mahim, and Warli Bunders, and at the Bunders north of the Frere Land Reclamation, will be charged half the rates laid down in this table for wharfage rents, &c.

Special Rates for Boilers, Machinery, Railway Plant and Materials.

	Wharfage.			Dock and Crange.			Total.		
	Rs.	as.	p.	Rs.	as.	p.	Rs.	as.	p.
Up to $\frac{1}{4}$ of a ton	0	8	0	1	0	0	1	8	0
Over $\frac{1}{4}$ and not exceeding $1\frac{1}{2}$ tons	0	12	0	1	4	0	2	0	0
" $1\frac{1}{2}$ " 5 "	0	12	0	1	8	0	2	4	0
" 5 " 8 "	0	12	0	2	0	0	2	12	0
" 8 " 100 "	1	8	0	10	0	0	11	8	0

Machinery in pieces will be charged by measurement or weight at option of Dock Officers; if by measurement, forty cubic feet will be considered a ton. Articles not landed on the wharf, but lowered into lighters, will not be charged wharfage, but only Dock and Cranage rates, unless the weight is kept suspended for more than quarter of an hour.

For lifting from the hold of a vessel and placing on deck half Dock and Cranage rates, but no Wharfage fee will be charged.

Vessels occupying the crane berth only for the purpose of using the 100-ton crane will be charged a fee of Rs. $2\frac{1}{2}$ for each working hour in addition to the Cranage fees.

An additional charge of Rupee 1 per ton will be made when articles required to be deposited on the wharf and afterwards lifted by the crane into trucks.

Boilers lifted out of a vessel on to the wharf for repair and then lifted back again will be charged full rates for the first operation and half rates for the second.

For masting and dismasting ships the following charges will be levied :—

For Ships of Ton.	Main Mast.	Fore Mast.	Mizen Mast.	Bowsprit.
1,500 to 2,000	210	110	85	55
1,000 to 1,500	110	90	65	45
750 to 1,000	80	60	50	30
300 to 750	50	40	30	20

In the case of masts and bowsprits the ship will provide slings and the labour required for slinging both for masting and dismasting.

In all other cases the ship will provide slings and the labour required for slinging articles to be landed; the Trustees will supply slings and labour for shipping and shifting on land.

Any special work done by the 100-ton crane, to which the above rates cannot fairly be applied, will be charged by the hour, ton, or lift, as may be agreed upon with the Dock Superintendent.

GENERAL MEETINGS IN 1882-83.

A SPECIAL GENERAL MEETING of the Bombay Chamber of Commerce was held on Tuesday the 6th March, 1883, to consider the Criminal Procedure Code, 1882, Amendment Bill.

Present :

Mr. JAMES THORBURN, *Chairman, in the Chair.*

Mr. J. P. Cornforth,
 „ J. Brandenburg,
 „ J. G. Russell,
 „ Macdonald,
 „ A. Blascheck,
 The Hon'ble W. M. Macaulay,
 Mr. J. L. Symons,
 „ J. Wilson,
 „ C. H. B. Forbes,
 „ Sorabjee Framjee Patel,
 „ Gaddum,
 „ J. K. Bythell,
 „ D. H. Glade,
 „ F. Forbes Adam,
 „ G. Cotton,
 „ L. R. W. Forrest,
 „ R. L. Stewart,
 „ G. W. Moir,
 „ E. Comber,
 „ A. F. Beaufort,
 „ N. S. Glazebrook,

Mr. E. Miller,
 „ J. L. Mackay,
 „ C. Poole,
 „ J. Cassels,
 „ T. F. Punnett,
 „ J. Fachiri,
 „ M. Mowat,
 „ S. D. Sassoon,
 „ J. Steiner,
 „ M. R. Wyer,
 „ M. Balfour,
 „ T. W. Wood,
 „ T. Forrest,
 „ C. Lowell,
 „ E. J. Reid,
 „ F. D. Parker,
 „ Vizbhookundas Atmaram,
 „ Ahmedbhoy Hubibbhoy,
 „ Dinshaw Manockjee Petit,
 „ Nanabhoy Byramjee Jeejee-
 bhoy, and



Mr. J. GORDON, *Secretary.*

Many other gentlemen who were not members of the Chamber were also present.

The Notice convening the Meeting having been read by the Secretary,

The Chairman said : Gentlemen,—You are all, I daresay, very well aware that at a meeting of the Viceregal Council held in Calcutta early last month the Hon'ble Mr. Ilbert, the Legal Member of the Government of India, asked leave to introduce a Bill to amend the Criminal Procedure Code of 1882, which was only passed in the beginning of last year—in fact, it is only just a year old to-day, having been passed on the 6th March, 1882. The object of our meeting to-day is

to consider the propriety of that measure becoming law or being carried any further. We have come here to pronounce our opinion upon it, and to express our views as to whether the amendment should take effect or not. As all of you who have been reading the daily press are aware, the question has been very warmly discussed, more particularly in Bengal, and it has also attracted very general attention in England. It is quite right, and quite proper, that we, as the representatives of the European mercantile community, and also of the non-official community of this city, should meet to discuss this question and express our opinion upon it; but I trust that nothing that will be said in this room to-day will have the effect or be likely to stir up ill-feeling either between ourselves and the Government of this country or between ourselves and our native fellow-subjects. I think that a temperate expression of opinion will be not only more dignified, but it will probably carry more weight, and by adhering to that principle we shall avoid giving offence to, or wounding the feelings or susceptibilities of, those with whom I think it is our duty as fellow-subjects of the same sovereign to be on a good and friendly footing. We were obliged, gentlemen, to call our meeting at a very late hour for various reasons, and I don't intend for that reason, and also for the reason that other gentlemen will speak presently to the resolutions which have been circulated amongst you, to go minutely into the subject of this proposed Bill myself; but I shall at the same time before sitting down take the opportunity of saying that I disapprove of the measure, and I shall give some reasons for saying so. The first thing that strikes me is that there is really no pressing necessity for this measure at all; and I don't think that we require to go any further than Mr. Ilbert's speech in asking leave to introduce this measure to show that this is the case. The Criminal Code, as you are aware, was last amended previous to 1882 in 1872, and this very question we are met to discuss came on then; and although I don't wish to go minutely into what took place at that time, I may say that it was carried by a majority of seven to five, that this amendment should not be given effect to. Mr. Ilbert takes great care to cite the opinions of the five who were in favour of that amendment being introduced into the measure, but he leaves out, or says nothing about, the opinions of the seven. I don't think it is likely that the whole of these seven were non-official members, for I think from our experience we may assume that no measure could be carried by a non-official majority in any Legislative Council in this country. To proceed, how-

ever, Mr. Ilbert starts by saying that from that time (1872) forward, when any suggestions were offered to the Government of India in the direction of the amendment of the Code, the question always came up. Now one would have thought that if that had been so, the Government would have taken the very earliest opportunity of ascertaining the opinions not only of their own officers but of the public generally, and would have acted as speedily as possible on the opinions they might receive. You have only to read a little further on, and it becomes quite apparent that for ten years they did nothing. This Code, as I have previously explained, became law a year ago to-day. The Government had completed all the amendments they intended to give effect to, and this question never came up at all, and, as Mr. Ilbert says himself, the now historical Mr. Gupta's letter or his suggestion that this amendment should be made in the Code came forward at the last moment when it was impossible to introduce it. What the Government afterwards did was to take the opinions of some of their own officers, and now we have the result before us. I think it is clear, as has been shown, that there is no pressing necessity for this measure in the shape of the proposed amendment. In fact, the only person whose name has been associated with it, as far as can be gathered, is Mr. Gupta, and, as Mr. Ilbert says, his letter gave rise to the discussion. That concludes what I have to say on that point, and I think there can be no question that there was no real necessity for introducing the measure, or any pressure brought upon Government to introduce it. Another point that strikes me, gentlemen, is this: it seems to me that the measure is premature. I have shown you from what Mr. Ilbert said that there was no pressing necessity for it, and I also think it unquestionably premature for this reason: this Bill will have the effect of touching the whole of the mofussil European community, while, on the other hand, it will only affect the status of some six Native Civilians in Bengal, and I think I have seen it stated only one here. Therefore, I say that for that reason it is premature. I also say it is premature for this reason, that the presidency towns are in a very much more advanced state than the mofussil. It is proposed to extend this measure to the whole country—to the most outlying and backward districts, where you may say that civilization has been barely introduced, and, I am of opinion that from that point of view the Bill is premature. If the mofussil was as advanced as our presidency towns are, then there might have been some reason for introducing a measure of this kind.

I not only consider, however, that the measure is premature, but I also consider it has been introduced at a very inopportune moment. We all know that the Government have got at least three very important measures before them at the present moment ; one of which at least introduces very radical and sweeping changes, and many people, including myself, I may say, think that the country is scarcely prepared or ripe for these measures. I cannot help thinking that that being so, it was particularly inopportune to introduce the measure at the present time, when other important measures about which there has been and likely to be a good deal of difference of opinion are pending. Then, gentlemen, I also object to the Bill, because it was brought forward without allowing the classes who are likely to be affected by it any opportunity of being heard. It has been, in a sense, sprung upon us, and not only upon us, but, as you may have noticed in the debate to which I have referred, the Hon'ble Mr. Evans—one of the members of the Council—stated that he heard for the first time on the day of the meeting what the proposed measure was. He was ignorant of the character of the measure, and we also were ignorant of it until it was brought forward in the Council. It strikes me as being very much out of place to introduce a measure of this kind on the strength of the opinions elicited by a private circular, without the non-official community generally having an opportunity of expressing their opinion upon a measure which was to effect them so closely as this measure does. It is all very well for gentlemen who would have the administration of the law to express approval of it, but it looks rather different to those who are certain to be affected by the administration of it ; and I cannot help thinking that when this private circular—which none of us have seen and which I should rather like to see—was sent round, probably, I think very likely, most of the officials to whom it was sent looked upon the question from a theoretical rather than from a practical point of view without considering what effect the introduction of such a measure would have on the country. I notice further, gentlemen, that Mr. Ilbert says in speaking of this circular that its result was very remarkable. Well I should think that he must have realised ere this that the effect of acting upon the circular has been very remarkable indeed. I think he must feel now, and I think that the Government of India must also feel, that they have made a blunder in bringing forward a measure of this kind without pressure, most inopportunately, and without the public likely to be affected by it having had an opportunity of expressing an opinion

about it. I will not say more now, other gentlemen having to speak to the resolutions which have been circulated amongst you. I think it is quite likely I may have touched upon some points which other gentlemen may speak upon, and if such is the case I hope that they will enlarge upon and enforce, rather than pass over any point that I may have alluded to. With these remarks, gentlemen, I call upon Mr. Mowat to speak to the first resolution.

Mr. Nanabhoy Byramjee Jeejeebhoy—Mr. Chairman, before Mr. Mowat proposes the resolution I should like to know whether you have received any letter from anyone.

The Chairman—We have received a letter from some of the members of this Chamber, and we have sent an answer to it. Have you got the answer?

Mr. Nanabhoy—It was the special desire of the members that it should be read before the Meeting.

The Chairman—I am asking whether you have got the answer?

Mr. Nanabhoy—That letter was for the information of the members.

The Chairman—I don't consider that there was any necessity for its being read.

Mr. Nanabhoy—Then you rule that that letter shall not be read. I bow to your decision.

The Chairman—I have not given any decision as yet. (Laughter.)

Mr. Nanabhoy—You say that the letter shall not be read.

The Chairman—The letter to which you refer was received about half-past two. It objected to this Chamber taking up this question, and the answer which was sent to you by my directions was that we considered it quite competent for the Chamber to discuss this question, and if you had any reasons to give against its doing so, you ought to come here and state them.

Mr. Nanabhoy—We are going to speak, and we have come here to speak.

The Chairman—Very well.

Mr. Nanabhoy—Then you rule that that letter shall not be read.

The Chairman—There is no necessity that it should be read, seeing

that you are, here to speak and vote for yourself like any other member of the Chamber.

Mr. Mowat said—In proposing the first resolution which runs thus :—“That in the opinion of this Meeting the Bill for the amendment of the Criminal Procedure Code is, under existing circumstances, uncalled for, and ought not to have been introduced without first eliciting the opinions of the non-official classes whom the proposed change in the administration of the law will affect”—I would draw your attention to the temperate manner in which it is worded, and in the remarks which I am about to make, I mean to be considerate towards the various races interested in the Bill lately brought forward by the Government of India. Throughout the length and breadth of this vast empire it has been the leading subject of discussion for nearly a fortnight, and it has been taken up with more than ordinary warmth in Bengal ; and the voice of England has not been silent. I most earnestly trust the tension which now exists will find a solution long before November comes round. Although we have been later in approaching the subject than our friends in Calcutta and Madras, we are not behind them in the interest we take in any matter affecting the criminal law by which our British-born fellow-countrymen are tried abroad. In order to grasp the leading facts, let me point out what was done in 1872. This subject was then thoroughly discussed, and the debates which took place in the Supreme Legislative Council possess more than ordinary interest. Although five eminent names, including an ex-Governor of Madras and the late Governor of Bombay, appear on one side, seven gentlemen who have also left their impress on India, took the opposite view, and one of those was the distinguished lawyer, Sir James Stephen, who had charge of the then Criminal Procedure Bill. By this Act, which was the result of a compromise, Native Magistrates in the presidency towns were allowed jurisdiction over Europeans, but their power extended no further, and the reasons for so doing appear to me to be very strong. Gentlemen, with public opinion and a powerful press such as we find in the great cities, we can understand why a difference was made between them and the mofussil. But even in the great presidency towns, cases arise which are surrounded with more than ordinary difficulty and which tax the keenest intellects of the Bench and the Bar. At a great social banquet, which took place in Bombay a little over three years ago, and at which I had the honour to preside, a Judge of the High Court, whose manly straightforwardness and upright character

have gained for him a wide circle of friends among all classes, expressed himself thus :—" The administration of justice in India and no less in Bombay is carried on with extreme difficulty owing to the vast preponderance of unworthy testimony by the native witnesses we have before us. A Judge in this country can only act on the facts in the case before him, and it would be impossible for us to form our judgments satisfactorily were it not for the admirable manner in which the cases are prepared by able and experienced solicitors and clerks, and for the arguments and the ability which are bestowed upon those facts by accomplished barristers." (Cheers.) If this is the case in one of the leading cities in the Empire, what safeguards must we insist on for the poor European in the districts? There are not able and experienced solicitors there; further, there are no accomplished barristers. But, gentlemen, I can tell you what will not be wanting. As a juryman I have had to listen to suborned witnesses: they and the other surroundings will find a place. An oath or affirmation to the uneducated native classes is of little or no value; and are we to expose our countrymen to criminal charges made on such evidence? Far be it from me to speak otherwise than respectfully of Native Magistrates whom this country chooses to honour with the dignity. As educated men we expect a great deal from them. But I hold that in a criminal charge against a European, things may arise on which an Englishman or British-born subject only can form a correct judgment. If, therefore, the Magistrate, witnesses and other surroundings are entirely native—can we suppose that there will never be a miscarriage of justice? From the public press which has lately been flooded with literature on this subject, we find that the native community are far from agreed, for in common fairness we may put Mr. Khory's letter of this morning against that of the Hon'ble Mr. Tyahjee. A leading Magistrate who had a great many years' experience in the mofussil, when speaking to me quite recently, was not slow to point out the dangers which would beset the proposed alteration in the law. Perhaps a time will come when a revision of the existing Code may be considered with advantage; but it is clearly not now. The lower classes amongst the native community must first be advanced. The non-official classes very justly complain that they have not been consulted in this matter, especially seeing that they will be affected by Mr. Ilbert's proposed change. The legal and official classes, however, were consulted, and we learn that they have not been unanimous. English capital is now pouring into the country

for reproductive works, necessitating a large number of European employés. They consist of railway servants, press and mill managers, cotton agents, and the like. In this Presidency they are fewer in number than in the other two, but they are not the less deserving of our care and attention. (Applause.) Their probable future is a question for the sociologist, and I cannot say that I look upon it with anything like satisfaction. With the progress of works in the mofussil their numbers will increase, but from the natives who are making such rapid strides in education, they will have to suffer the keenest competition,—a competition not likely to diminish. A large portion of those now labouring in the districts will never again behold the island which gave them birth, while their families will have to make the best of life under all the disadvantages of a tropical sun. These are the classes most likely to be seriously affected by the new Bill, and as they can least protect themselves, it is our duty to see that their rights and privileges are kept inviolate. They supply that cheap European labour which at the present time is indispensable in the formation of public works. As a rule, many of them are poor, and the fee necessary to secure the services of an English barrister, or a first-class vakeel, for defence in a criminal charge, is more than they are able to command. Let us, therefore, be careful and not deprive our poorer countrymen of privileges which they have hitherto enjoyed and to which they attach the highest value. According to the best authorities, they now do this without in any way interfering with the rights of the natives of the country. Sir James Stephens' remarks are valuable. He says :—" In countries situated as most European countries are, it is no doubt desirable that there should be no personal laws ; but in India it is otherwise. Personal as opposed to territorial laws prevail here on all sorts of subjects and their maintenance is claimed with the utmost pertinacity by those who are subject to them. The Mahomedan has his personal law ; the Hindu has his personal law. Women who, according to the custom of the country, ought not to appear in Court, are excused from appearing in Court. Natives of rank and influence enjoy, in many cases, privileges which stand on precisely the same principle ; and are English people to be told that, whilst it is their duty to respect all these laws scrupulously, they are to claim nothing for themselves ? That whilst English Courts are to respect, and even to enforce, a variety of laws which are thoroughly repugnant to all the strongest convictions of Englishmen, Englishmen who settle in this country are to surrender

privileges to which, rightly or otherwise, they attach the highest possible importance? I can see no ground or reason for such a contention." (Applause.) We have now to consider in a careful spirit what ought to be done. It is not too late for Government to withdraw the Bill, and this might be gracefully done in the interests of all concerned. No one wishes to see a race feeling exist, and our native fellow-subjects are no doubt as anxious on this point as we are. The Government is full of other schemes for their advancement, and it is a good old maxim not to have "too many irons in the fire." A thing may be done with dignity and prudence to-day, which the force of events, if not checked, may materially alter in a week's time. In conclusion, I appeal to the Imperial Government to withdraw a measure which under existing circumstances is unnecessary; I appeal to those in power to stem the current of class feeling which appears to have arisen on the other side of India, and which, if continued, may be fatal to the best interests of the country. (Loud applause.)

The Hon'ble W. M. Macaulay: Mr. Chairman and gentlemen,—When I consented to second the resolution which Mr. Mowat has just read, I did so in the firm conviction that it is not desirable for us to follow the footsteps of our brethren in Calcutta in the manner of our opposition to the Bill. I think it is very much to be regretted that some of the speakers there permitted themselves so far to forget what they were saying and their duty to their fellow-subjects as to use language, which one, at least, has since apologized for. Such language cannot assist in achieving the object we have in view, but would rather damage it. In speaking to the resolution I shall, with your permission, first refer to the second portion of it; and I confess to a feeling of very deep regret that the Government of India have introduced a measure of such vital importance to a large and most important section of the community without consulting one individual of the community affected by the measure. It is true, as Mr. Ilbert informed the Council, that the various local Governments were consulted, and that none of them objected to it. We are also told that the opinions expressed by the officials, who had been consulted, showed an overwhelming consensus of opinion in favour of the proposed change. But it was only a short time ago that a Bill, which was passed through the local Legislative Council of Bombay, and supported, by what was termed an overwhelming consensus of official opinion, was vetoed by the same Government that now attaches so much importance to the same official opinion. I think, therefore,

this leaves a door open to them by which they can gracefully retire. They can with very good ground assign as their reason for retiring from the position they have assumed—that they have acted on incorrect information. We have been told that the Judges of the High Court of Bombay have, with one exception, expressed themselves in favour of the measure. This may be so ; but I think it not improbable—in fact, I have some grounds for saying so—that the opinion which was so given, was more an opinion from a theoretical point of view, as the Chairman has observed, than from a practical point. If the Judges of the High Court here, whom we all respect, as was justly observed, had been asked to express their opinion as to the practical application of these changes to the whole of the mofussil districts of India, to the outlying provinces of Assam, the Punjab and other partially civilized localities, I do not hesitate to say that there would have been amongst these Judges more than one dissentient. (Hear, hear.) It is a source of great regret to every right thinking person that the Government of India did not take the public into their confidence as they had promised to do. It was perfectly easy for them to have ascertained to a nicety what the English public would think of the measure by consulting public bodies like this Chamber. There are also Planters' Associations, Trades' Associations, and such other bodies in various parts of India, who, on a reference being made to them, could have told that the measure would raise a storm such as we are now experiencing. Happily for us, the circumstances of Bombay, and even the mofussil of Bombay, render the measure less objectionable, if confined to Bombay than it would be if applied to the whole of India. In this city, of which I have had a very lengthened experience, I know that the feeling of amity that exists between the two races of Europeans and Natives is very different from what exists on the other side of India. Here there is more mutual confidence and friendship than elsewhere. I have heard many intelligent native gentlemen, several of whom rank amongst my friends, express their opinion that, for their part, they would prefer to have their affairs dealt with by European Judges rather than by their own countrymen. We cannot on such a subject as this expect to have unanimity ; but I think that there is a very strong section of the native community who think that the Bill is not at all called for. In our daily mercantile experience, we come in contact with numerous natives ; and in hundreds of cases they enter into contracts with Europeans, readily agreeing to refer their disputes to the arbitration

of Europeans. This, I think, speaks volumes for the confidence they repose in the integrity of Europeans. That the measure is uncalled for, at present, there cannot be the slightest doubt. Until the introduction of the measure the other day before the Supreme Council, so far as I know, the question had slumbered since the discussion which took place in the Council in 1872. Our native fellow-subjects have lately been more than satisfied and gratified by the radical changes which have been introduced, or which, to speak more correctly, are about to be introduced; and these changes will give them a good deal of power in the management of their own affairs. It is a great pity, as the Chairman has pointed out, that for the benefit of a few Native Magistrates the right of the many should be sacrificed. However, I think the number of Magistrates who will be affected by the Bill is not so very small as the Chairman believes. I think in this Presidency alone, some half-a-dozen Magistrates would be affected by it. But even if the number were ten times half-a-dozen, it is no justification for introducing a measure which is calculated to stir up strife and re-open wounds, which, we hoped, had healed. When the Local Self-government scheme was not yet put into force, it is most inopportune that the Government should have introduced further legislation, especially of such a character as this. I am afraid that if the Bill be proceeded with, it will prejudice to a great extent the proper development of this scheme in the future. Great progress has been made within the last twenty years. Had it not been so, the modified change which permitted Magistrates of native birth to have jurisdiction over Europeans in the presidency towns, would not have been brought about. But I repeat that it is premature at this early stage to introduce such a radical change from laws which have always been in force since the country has been occupied by our countrymen. (Applause.)

Mr. N. Byramjee Jeejeebhoy said: Gentlemen,—I rise to propose an amendment to the proposition which is before the Meeting. I am strongly of opinion that this Chamber will be exceeding its functions by committing itself to a proposition of this nature. Ever since the Chamber was first established—on 22nd September 1836, mainly owing to the exertions of Mr. Harry George Gordon, of Messrs. Ritchie, Steuart and Co., it has never ceased to interest itself in the commercial welfare of the city and port of Bombay, and has on numerous occasions rendered most valuable assistance and collected important information, not only to the advantage of the local

commercial community, but to the Government of India, who has frequently consulted the Chamber on special important subjects. The Chamber has hitherto steered clear of all race distinctions and has shown itself most creditably above all race prejudices. This characteristic of the Bombay Chamber of Commerce has been acknowledged and emphasized by the admission of natives. The Chamber has always been considered an influential and representative body, but since the accession of native members, its representative power and character has increased considerably, and instead of representing only one class of the vast mercantile community of this city, it now lays claim, and very justly to, to be the advocate and mouth-piece of the whole commercial community of this Presidency, and is no longer the European Chamber of Commerce, but truly and literally, the Bombay Chamber of Commerce. What does the Chamber represent as a body? It represents Bombay commerce, and should be very careful not to curtail its representative character by lending its influence to politico-sectarian sentimentality and race questions. The Bengal Chamber and the Madras Chamber may be excused for their action in the matter of the Jurisdiction Bill, composed as they are entirely of European merchants. It is not very long, gentlemen, since this Chamber extended its scope of usefulness and influence, but during the short time that has elapsed since the joining of the native members, things have gone on very smoothly and harmoniously, and it would be a thousand pities were that harmony and unanimity to be unnecessarily disturbed. I do not wish to enter now into the controversy about this Bill which the Government of India, all the local Governments, Her Majesty's Secretary of State, and all the more distinguished officers of Government throughout India, considered necessary for the due administration of justice in this country, and all I wish to say is that such a proposition as that moved by Mr. Mowat should not, and could not, come appropriately from a mixed Chamber of Europeans and Natives. If the European merchants of Bombay are desirous of giving expression to their views about the Bill, by all means let them do so at a public meeting of the European citizens. I am aware that I shall be in a very small minority, and the proposition will most probably be passed in spite of my humble opinion: yet, gentlemen, I conscientiously believe it to be my duty to make that opinion known and my feeble voice raised against what I respectfully submit and maintain is an unnecessary and untimely proceeding likely to disturb the harmony of the Chamber and to mar

the goodwill which now happily characterises its proceedings. If this much-to-be-regretted action on the part of this Chamber will, as I apprehend it is sure to do, give rise to a strong counter-movement on the part of the native community of Bombay, the Chamber will be responsible for creating any bad blood and angry feeling which may unhappily arise, and I am sure no one will be more sorry than I shall be if the commendable good feeling and harmony which exists in this Presidency amongst the different sections of our mixed community are needlessly disturbed or destroyed. Gentlemen, my first connection with the Chamber dates so far back as 1865, and from that time up to now I have never known a single instance in which the Chamber lent its influence or countenance to any question of race or class distinctions or differences, and it ought not to do so now. (Applause.) With these remarks I beg to propose as an amendment—"That in the opinion of this Meeting the action now proposed to be taken with regard to the Criminal Procedure Amendment Bill is one foreign to the object and purposes of the Chamber, and that it is highly desirable for many obvious and weighty reasons that the Chamber decline to take up any politico-sectarian question."

Mr. Sorabjee Framjee Patel said : Gentlemen,—I rise with reluctance to second the amendment my friend Mr. Nanabhoy Byramjee Jeejeebhoy has proposed, for I consider it unfortunate for me at this juncture to be compelled to go against the wishes of gentlemen for many of whom I entertain the highest esteem. With not a few of them I have at times been associated in discussing important questions in a most friendly spirit, when serving as a member of the Committees of the Chamber. In fact, gentlemen, my connection, including that of my father, with the Chamber, dates as far back as the last 35 years or more, and I must admit that in this long interval both he and myself have received every kind consideration at its hands, as I am sure my native friends who have since joined have also experienced. I therefore feel it the more incumbent to appeal to your good sense and judgment to avoid, as far as it may be in your power, taking any step that may tend to disturb the harmony which has for many years so happily prevailed. What I beg of you, gentlemen, is to weigh calmly my request ; for I am no less grieved at the disunion which your resolution will create in the Chamber than the ill-feeling and passions it is calculated to arouse throughout the great and varied commercial community of Bombay. The sequel of your step in this matter might unfortunately be either the holding of public meetings

by those who are in favour of the Bill, or unpleasant, injudicious and imprudent writings in the press. In both cases no one, as you are aware, can answer for the lengths to which party feelings and passions may be carried by those who cannot command themselves. But the effect of all this will be certainly most disastrous to all concerned, and will excite bitter feelings and leave indelible reminiscences which it will take perhaps a full quarter of a century to efface. I have no wish, gentlemen, to enter into a lengthy discussion with such intelligent and liberal-minded members as those who are in favour of the resolution ; but I cannot help drawing your attention to the fact that you cannot with propriety take up questions which are purely political and do not affect the general commercial interests of the community, nor could you take up class questions, much less grievances, of a particular race. In support of this assertion, permit me to quote the very first of our Chamber's rules and regulations. It states that " the object and duties of the Chamber shall be to encourage a friendly feeling and unanimity among commercial men on all subjects involving their common good, to promote and protect the general mercantile interests of this Presidency." I ask, with your permission, does the action which the Chamber is asked to take tend to " promote and protect the general mercantile interests of this Presidency ?" Will it " encourage a friendly feeling among the commercial classes on all subjects involving their common good ?" Does it come within the category of " the removal of all acknowledged grievances affecting merchants (European and Native) as a body, or affecting mercantile interests in general ?" Certainly not. I am sure, gentlemen, if you will only dispassionately weigh my reasons and arguments, supported by the fact that they are based on the fundamental rules and regulations framed by this Chamber, you will, I doubt not, adopt the amendment proposed by Mr. Nanabhoy and seconded by myself. In coming to a conclusion on this important question, I beseech you not to let your party feelings be roused by what indiscreet persons may have said and written elsewhere. (Applause.)

Mr. J. K. Bythell : Mr. Chairman and Gentlemen,—I came here this afternoon determined not to speak, but after the remarks made by my friends Mr. Nanabhoy and Mr. Sorabjee, I should like to say a few words. Their argument, as I understand it, is that the Chamber has exceeded its functions, and that its functions ought to be limited to what they term measures affecting our commercial welfare. They are also of opinion that we are proposing to take steps now which are

likely to raise class prejudices and to create race feeling. It appears to me that the Chamber is not exceeding its functions at all. A great many of us have representatives in the interior, and if we deal with a measure which is introduced into the Legislative Council affecting our welfare and detrimental to our interests, it seems to me that it is quite within our functions to bring the matter before the Chamber of Commerce, which is the only body in Bombay representing our interests. (Applause.) I think the two gentlemen who have just spoken are mistaken when they are inclined to think that the resolutions before the Meeting will, if passed, foster class prejudices. Native gentlemen know that we not only welcome them when they propose to join us, but that we have invited them and asked them to do so. I can say that during the time I was officially connected with the Chamber I did all I could to get my native friends to join the Chamber. I have always wished to get as large a proportion of native merchants and native gentlemen connected with trade in the Chamber as possible in order that it might be strictly representative of Bombay Commerce and not merely representative of a class; and I think that these gentlemen will say, on reflection, that it is quite possible for us to be very strongly averse to having any of our European *employés* in the interior tried by Native Magistrates where we cannot get a European barrister, and yet have no feeling of antagonism towards our native friends. Even in the case of natives, cases have been known in which men have been tried and convicted in the interior with respect to matters which, if tried in Bombay, would have resulted immediately in an acquittal. Take, for instance, the old Cotton Frauds Act. You know that in Dharwar and in many other parts of India, where there was no public opinion and no press, natives were prosecuted, convicted, and fined for mixing cotton from adjoining fields; and, as I have told, gentlemen, Government servants, the same thing was being done here by European merchants, myself included, and that they should come and prosecute us in a place where we could get a barrister to defend ourselves. There is an example, and a very forcible example, between the justice in a place where you cannot have counsel to represent you, and have no public opinion, and the dispensing of justice in Bombay, where you have a strong press and can employ counsel to defend you. (Applause.) It is quite possible for us to hold a strong opinion upon this subject and yet not be actuated by class prejudices. (Hear, hear.) We don't object to native gentlemen acting as Magistrates in Bombay, where there is a healthy public

opinion, and where we can have our fellow-countrymen as counsel ; and it appears to me that if race questions are raised, it is not the Chamber who is to blame, but the Government of India who stirred this matter up. (Applause.) The old state of things did no harm to anybody. Mr. Macaulay thinks that the Chairman was mistaken in stating that only one gentleman would be affected by having these powers given to him if the Bill is passed ; but I have been informed that this is correct, and that there is only one gentleman in the Presidency on whom these larger powers would now be conferred under the amendment if the Bill were passed, and, therefore, why stir up all this class prejudice and set us all by our ears in the manner that the Bill before the Government of India has done ? (Hear, hear.) With reference to the question of giving more extended power to the natives I may say that I differ most materially from the Chairman that this proposed extension of Municipal power is a mistake. When the Municipal Act under which our Corporation now sits was introduced, we had sixteen days consecutive debate in Poona about it, and I protested most strongly against the inhabitants who are allowed to elect one-half of the members of the Corporation having no power virtually to do anything beyond voting the budget. In the same way when the Mofussil Municipality Bill, which was passed in 1873, came on for consideration, I protested most strongly against the principle of the Bill, and contended that so long as you had the Collector in the chair, a great many official members on the Board and all the non-officials elected by the Chairman, it was a farce to call it a Municipality at all. I would go in for giving the natives much more power in these things, but while advocating their claims in that way, I must say I do object very strongly indeed to Europeans connected with our own firms in the interior being brought up before a Native Magistrate, where we cannot have the assistance of our own countrymen to defend them. It has been spoken of as an anomaly that these things should exist : I know that this is delicate ground to touch on, but as a newspaper said the other day, " If you are going to take up that argument, our whole position in India is an anomaly." So long as we are in India anomalies must exist, and it appears to me that the best course for the Government of India to take is to leave such matters alone, unless it can clearly be shown that great injustice is being inflicted upon some body. In the case of this Bill, it is impossible to show that injustice is being done. You cannot say that [it is great injustice that half-a-dozen gentlemen invested with magisterial powers should not

be permitted to try Europeans. We contend that this Bill, if passed into law, instead of allaying class prejudices, will foster them to a great extent, and I hope that the Government of India will be induced to withdraw the Bill. I hope that the native gentlemen connected with this Chamber will realise and see that it is quite possible for us to oppose this Bill and yet entertain very kindly feelings towards them, and that we are always very glad to see them amongst us. (Applause.)

Mr. Vizbhookandas Atmaram said—As a party signing the protest*, which has just been read over to the Meeting, I feel constrained to say a few words so as to explain fully the reasons which have induced us to adopt this course in reference to the action it is intended to be taken in the name of the Bombay Chamber of Commerce regarding the alkengrossing and really burning question of the day. At the time when we made up our minds to enter this protest we were fully alive to the fact that our motives in this matter are most likely to be misconstrued and misinterpreted, inasmuch as this question has unfortunately assumed an aspect which is gallingly painful to every true lover of India. It is certainly to be regretted that the tone and spirit of the opposition adopted in this matter in Bengal and Madras has called into existence race antipathies which certainly prevents a just, proper, and considerate treatment of this question; but so far as this Meeting is concerned, it is unnecessary for us to go into the merits and demerits of this question, because I can assure you, gentlemen, that in arriving at this decision, we have not at all been influenced by any arguments which have been or can be advanced for or against the Bill now before the Viceregal Council. We feel that this is not the place for discussing political questions involving sectarian interests. The only reason which has induced us to oppose the passing of the resolutions proposed at to-day's Meeting is that the action of the Chamber in this matter is not one which it could legitimately, on a plain and rational construction of the objects of its constitution, adopt. The objects and duties of this Chamber, as its very name tacitly implies and as its rules and regulations expressly declare, are to concern itself in matters purely commercial. The rules further provide that the only occasions on which it can, by its constitution, communicate with public authorities, are when subjects of *general mercantile interest* render them necessary. I fully admit that the objects and duties of the Chamber are expressed in

* Not read at the Meeting.

general words ; but I venture to state that it is not possible to include even within these general words the subject of the so-called criminal jurisdiction, except by putting a very strained and far-fetched construction upon the words used in defining such objects and duties. The question really involved in the Criminal Jurisdiction Bill is purely political, appertaining to one section of the community. It is certainly one in which the parties who may feel affected by it have a right to plead their case ; but we feel that it ought not to be in the name of a body which is formed for commercial purposes, and not for advocating political or sectarian interests. We are fully aware that it has been alleged that this Bill will indirectly and remotely affect the commerce of the country, but I feel sure that this is simply a sort of wild and vague fear savouring of an irrational panic, which could hardly be reasonably entertained by any sensible person. We fully admit that the Jurisdiction Bill may be said to affect the European community, and that may be a good reason for them as a body to make such representation as they may deem necessary, but we certainly think that, by itself, it is not sufficient justification for any action to be taken in the name of this Chamber. It is not improbable that legislative measures may hereafter be deemed necessary which may affect one or other of the numerous other communities existing in India, and which may also be, in some remote and indirect way, alleged to affect the commerce of the country. Now I ask you, gentlemen, could this Chamber of Commerce, consisting as it does of the most sensible and practical classes of the people, establish by their action this day a precedent which may be quoted as an authority whenever it may be called upon to take up the cudgels for one community or other. I submit, gentlemen, for your careful consideration to-day, whether this Chamber, in the action it purposes to take, is not acting *ultra vires* and is not pledging itself to take action in matters which are purely and directly only political and involving sectarian interests. We feel satisfied that the resolutions proposed are not within the legitimate province of this Chamber, and we therefore feel it our duty to vote against the same, and to support the amendment just put before you by my friend Mr. Nanabhoy B. Jeejeebhoy.

The Chairman said that before putting the resolution to the vote he would say that as their native friends had argued for the most part that it was not competent for the Chamber to take up a question of this kind and discuss it, he would refer the Meeting to the rule quoted by Mr. Sorabjee, in which it was stated that the object of the Chamber

was "to obtain the removal, as far as such a society can, of all acknowledged grievances affecting merchants as a body, or mercantile interests in general." Section ten of the rules bore more particularly upon the question at issue. It was to the effect that one of the objects of the Chamber was "to discuss any measures of public interest which might arise." He (the Chairman) thought that the present question was a measure of very public interest and that they were quite competent to discuss it. He thought that the native gentlemen present that day must be satisfied from what they had heard that there was no wish on the part of any of the speakers to arouse class prejudices. Every speaker had been very careful to keep the race question in the back-ground whilst urging in general terms the impropriety of introducing this measure or of pressing it any further.

The amendment was then put to the Meeting and lost by a large majority, only the three native gentlemen who had spoken, voting for it. The resolution was then put to the Meeting and carried.

Mr. Sorabjee asked that the Chairman would record the protest against the discussion of the subject by the Chamber.

The Chairman said that the amendment would go on the records of the Chamber.

Mr. Sorabjee said that the protest had not been read.

The Chairman said that if the practice was adopted of reading letters at the Meetings, the Chairman would have only empty chairs to address. (Hear, hear.)

Mr. Sorabjee said that it was usually the custom to send a circular round asking whether such and such a subject should be taken up or not ; but this had not been done on the present occasion.

The Chairman said that a certain amount of discretion must be left in the hands of the Committee.

Mr. Bythell suggested that the protest should be recorded.]

The Chairman said that the protest had been recorded and would go on the record of the Chamber.

Mr. Nanabhoy said the first intimation that he had received that the Meeting was to be held was at two o'clock on Monday, and he was not in office at the time.

The Chairman said that Mr. Nanabhoy came to the Meeting quite prepared to discuss the matter, and he did not see what he had to complain of. He was informed that the circular calling the Meeting was sent to Mr. Nanabhoy's office twice.

Mr. Nanabhoy—My house is not far away. I am living at Maza-

gon. The circular ought to have been sent there. (Cries of "Non sense," "absurd," &c.)

Mr. Clement Poole said—I beg to propose "that the following members of the Chamber, namely, the Chairman of the Chamber, Mr. M. Mowat, the Hon. W. M. Macaulay, Messrs. Bythell, Russell, L. R. W. Forrest, and Blascheck, be appointed a Sub-Committee, with power to add to their number, to prepare a memorial to the Viceroy praying that His Excellency may be pleased to abandon the proposed alteration in the law." At this late hour I would not recapitulate the remarks made by the previous speaker, but I will say this, that the names of the Committee read out to you are a sufficient guarantee that the memorial which will be presented to Government will be drawn up with moderation and good sense, and will be free from expressions which have reached us from other places. (Applause.)

Mr. Blascheck said—I second the resolution. I abstain from making any further remarks at this late hour.

The proposition was then put to the Meeting and carried.

A vote of thanks to the Chairman concluded the proceedings

A SPECIAL GENERAL MEETING of the members of the Chamber of Commerce was held on Friday the 20th July, 1883, in accordance with the following requisition :—

BOMBAY, 16th June, 1883.

JAS. THORBURN, Esq., Chairman, Chamber of Commerce.

DEAR SIR,

We, the undersigned members of the Chamber of Commerce, request you to call a General Meeting of the Chamber to consider the advisability of altering the Tonnage Scale for Seeds and Wheat, and to pass such resolutions as may be agreed to.

Yours faithfully,

WALLACE & Co.
p.p. FRAMJEE, SANDS & Co.,
 ROBERT LEE SANDS.
 DAVID SASSOON & Co.
 E. SPINNER & Co.
 PUNNETT & Co.
 LYON & Co.
 GREAVES, COTTON & Co.
 VOLKART BROTHERS.
 KILLICK, NIXON & Co.
 RITCHIE, STEUART & Co.
p.p. GEORGE LOCKHART & Co.,
 JAMES POUTZ.
 GLADE & Co.
p.p. A. BLASCHECK & Co.,
 J. TINTNER.

PEEL, CASSELS & Co.
p.p. GADDUM, BYTHELL & Co.,
 F. HOOPER.
 JOHN MARSHALL.
 LANG, MOIR & Co.
p.p. C. MACDONALD & Co.,
 JAS. W. BROWN.
p.p. OWEN & OKELL,
 GEO. McLAREN.
 E. D. SASSOON & Co.
 NARANDAS RAJARAM & Co.
p.p. RALLI BROTHERS,
 J. FACHIRI.
 BENN, ASHLEY & Co.
 C. H. B. FORBES & Co.
 ALDRIDGE, SALMON & Co.

Present :

Mr. JAMES THORBURN, *Chairman, in the Chair.*

Mr. J. P. Cornfort,	Mr. C. Macdonald,
„ J. Brandenburg,	„ D. MacIver,
The Hon'ble W. M. Macaulay,	„ Vizbhokundas Atmaram,
The Hon'ble S. D. Sassoon,	„ J. Cassels,
Mr. C. H. B. Forbes,	„ J. Fachiri,
„ Sorabjee Framjee Patel,	„ M. Mowat,
„ F. Forbes Adam,	„ J. Steiner,
„ R. S. Campbell,	„ M. R. Wyer,
„ G. Cotton,	„ N. Byramjee Jeejeebhoy,
„ F. M. Flower,	„ J. Janni,
„ L. R. W. Forrest,	„ T. W. Wood,
„ R. L. Stewart,	„ F. D. Parker,
„ W. Lang,	„ F. Bozzoni,
„ N. S. Glazebrook,	and

Mr. J. GORDON, *Secretary.*

The Notice convening the Meeting having been read by the Secretary,

The Chairman said that a good deal of correspondence had taken place on the subject of readjusting the tonnage scale, and that a protest had been received. As both the correspondence and the protest had already been printed and circulated, he would like to take the sense of the Meeting as to the necessity of reading them.

On the suggestion of Mr. Mowat, it was decided to take them as read.

It appeared from the correspondence that at a meeting of merchants interested in the export trade held on the 20th June, under the presidency of Mr. Mowat, it was resolved that “the Committee of the Chamber be respectfully asked to test, in the usual way, the following articles mentioned in the tonnage scale—namely, wheat, gingelly seed, rape seed, and mustard seed, and state how many cwts. of each article are contained in 40 cubic feet, with the view of confirming the measurements given in a report of the Chamber dated 3rd January, 1879.” Accordingly the measurement of the articles referred to was tested in the godown of Messrs. Ralli Brothers at Carnac Bunder, the following being the results :—

Wheat (Ekdani), Soft White, from Jubbulpore	...18 cwt. in 40 c. ft.
Teel Seed, from Hingunghat	15 do. 40 do.
Guzerat Rape Seed	16 do. 40 do.
Mustard Seed...	16 do. 40 do.

On the 26th ultimo, before the testing had actually commenced, a protest was addressed to the Chairman.

The Chairman intimated that a letter bearing the signatures of captains of some of the vessels in port had been received, protesting, on behalf of the owners, against any change being made in the tonnage scale for steamers. Letters were also read in favour of the change, the writers stating that the trade in wheat would be greatly assisted thereby. He then briefly referred to the past history of the question, and quoted from former reports what had been done in the direction of adjusting the tonnage scale.

Mr. Fachiri then proposed the following resolution :—“That rule 1 prefixed to the tonnage scale be cancelled, and the following rule be substituted :—‘That the tonnage scale for steamers shall be on the basis of 40 cubic feet to the ton, but in no case to exceed 20 cwt. dead weight.’”

Mr. J. Steiner seconded the proposition.

Mr. Mowat—The subject which is now before the Meeting is not a new one to me, and in the remarks which I am about to make I shall endeavour to handle fairly the interests of all concerned. At the time the tonnage scale for steamers was revised in 1872, shortly after the opening of the Suez Canal, the basis of 40 cubic feet was taken that being the space allowed by the Peninsular and Oriental Company, which for many years had the lion-share of the steam tonnage trade to Europe. At that time the business in wheat from this port was almost *nil*, and I believe in framing the scale 16 cubic feet was adopted without testing the space which this quantity of the article would occupy. The argument used was this—by sailing vessel you allow 50 cubic feet or 20 cwt. ; knock off one-fifth and you get 40 feet and 16 cwt. The anomaly you are now discussing arose in this way. It has given trouble for several years, and in my opinion the sooner you grapple with it the better. When Chairman of this Chamber nearly five years ago I endeavoured to do so ; and although the subject was not so ripe for discussion then as it is now, I could foresee that the correction of the tonnage scale would only be a question of a little time. Of late years the agitation has increased, as the records of the Chamber show ; and it will continue to do so until the shipper who contracts for 40 cubic feet of space gets it. It is not the Bombay merchants alone who are crying out for the proper adjustment : it is only a little over a year since the Liverpool Chamber of Commerce

addressed you on the subject. At a time when you are agitating for cheap carriage of grain from the interior (and I hope you will be successful in your efforts) the Railway Companies might well turn round and say, "First put your own house in order." Railway carriage falls upon all traders alike; not so a scale which calls 35 cubic feet a ton for one article, and 40 feet for another, both articles being less than what is termed dead weight. At the neighbouring port of Kurrachee things are otherwise. Wheat is carried at 18 cwt. to the steamer ton, which is just 40 cubic feet, and Bombay is thus handicapped at the boundary where business gravitates either to the one port or the other. Who can best assist us in getting this state of things rectified? The representatives of the regular lines of steamers. Yet I am sorry to see that they have put in a protest against our making any alteration in the defective scale. They, however, virtually admit that wheat at 16 cwt., owing to its small bulk, has an advantage over other cargo, and they accept the same at a differential rate which often makes up for the smaller space so occupied. If they would only admit the necessary changes I am now advocating, they would be able to put wheat, seeds, and cotton rates on a par, and no merchant would object to this. Who, then, are the gainers by the unfortunate anomaly in our tonnage scale? The owners of chartered vessels. Most charters are made for "lawful merchandise according to the Bombay tonnage scale," and as the greater part of our leading articles of export are shipped on the basis of 40 cubic feet we know that the greater generally governs the less. The steam-ship owner is quick at making a bargain, and at the present time business is too often rendered difficult by stipulations: for example, in the case of wheat, they want, say, 1,500 tons as part cargo. Why? Because it shows a better result in the freight list. You are all aware that in the year 1881 there was shipped from this port 470,000 tons of grain—say 564,000 tons of steamer measurement, or sufficient cargo for nearly two hundred boats. A large portion of this went by chartered vessels, which accordingly made 12½ per cent. more than they would have got for cotton. And for working the Continental trade successfully chartering on a large scale is absolutely necessary. As freights for a part of the season to which I have called your attention were very high—sometimes 40s., twelve and a half per cent. on which is 5s. per ton, or more than one shilling per quarter—you can easily see the heavy tax imposed on the carriage of this article. By making anything like a fair allowance for the

quantity carried by the regular liners, you will find that a good many tens of thousands of pounds sterling were put into the pockets of shipowners which they would have never got had wheat been put on the same basis as cotton in your tonnage scale. It is an old saying, "It is never too late to mend," and let me further commend to you the axiom that things which are equal to the same thing ought to be equal to one another. If we get 40 cubic feet for cotton, I do not see why we should not get the same for wheat. From the rapid strides lately made in the trade, this bids fair to be the largest season on record. Before the interruption of communication on the railways the volume of produce poured into Bombay was unprecedented. The railway receipts for the half-year to 30th June considerably exceed those of former seasons. In many respects the trade is in its infancy, and with the opening up of the interior it will grow rapidly. Recent reports show the superior nature of the Indian cereal, the favour in which it is held, and the market which it is making for itself. Although I have touched chiefly on wheat, my arguments hold good regarding a number of oilseeds, particularly rape seed and gingelly seed. If you find any force in my arguments I hope you will decide on making the necessary changes at this Meeting; and a resolution which is to follow will show that it is intended to allow ample time to lapse before the changes are brought into force. By this means existing contracts and the rights of all interested will be cared for. That the trade has borne up against falling markets at home, heavy railway charges from the interior, and an unfavourable tonnage scale such as I have described, shows its wonderful vitality. Remove every obstruction in your power, and you will have contributed your share in an effort to enable India to compete successfully for a prominent place in the great cereal trade of the world. (Applause.)

Mr. F. D. Parker moved an amendment to the effect that "in any revision of the tonnage scale which might be decided on by the Chamber, or any addition thereto, the present basis for ship and steamer tonnage should be adhered to." In the course of his remarks he said he thought it must be a matter of regret to many of them that the question had been reopened. He thought that the matter had been finally settled on the last occasion that it was before them. In that Chamber the shipowners were in a very small minority, and it was not, therefore, to be expected that they would be bound by any decision to which the majority might come. Every agreement required two parties, and an arrangement of the kind which was now

proposed could only be brought about by mutual consent. A change in an old-established custom was very undesirable indeed, and could serve no good purpose. On the contrary, it would lead to much confusion and dispute. Mr. Mowat had reminded them that eighteen cwt. to the ton was the scale at Kurrachee, but he (Mr. Parker) did not see that there was any reason why they in Bombay should assimilate their scale to that which was used in Kurrachee. If they wished to have two cwt. more to the ton than they had at present they would have to pay for it in the freight. If the tonnage scale must be altered, let them alter it from beginning to end. He considered, however, that at present the scale was a very equitable one. There might be a few anomalies, but they were allowed for in all cases. He did not wish to question in any way the correctness of the results of the testings, but he would remind them that there was frequently a considerable difference in the weight of wheat. He did not think that the present scale of sixteen cwt. to the ton was very far from the mark. There were two sections in that Chamber, the shippers and the shipowners, and he asked them to consider the effect of the proposed change before they brought it into operation. The first object of the Chamber, he said, was to get unanimity among the commercial men; and if they decided to pass the resolution, which the shipowners were helpless to resist, owing to their being in a minority, it would not have a good effect. They had had a protest against the proposed change from the captains of the ships in the harbour, and that strong expression of opinion on the subject was entitled to their best consideration. (Hear, hear.).

Mr. Bozzoni seconded the amendment.

Mr. Lang spoke in support of the resolution, saying, in reference to a remark made by Mr. Parker, that he saw no connection between the remodelling of the whole tonnage scale and the question of making an alteration as regards the scale for seeds and wheat exported from Bombay. As regards freight, shipowners could make their own terms. The local companies could adopt any scale they liked, and as a matter of fact the P. and O. Company did not adopt the present scale. Shippers accepted their terms if they suited them, and did not if they did not suit them. Therefore local interests would not suffer in the slightest degree.

Mr. McIver supported the amendment. In the course of his remarks he said that for the last five years he had been at Kurrachee

and had had experience of the double scale. Steamers there, he said, had adopted the Bombay tonnage scale, and where the Kurrachee scale had been adopted it had been at a different rate for freight. The result of carrying the proposed alteration into effect would be that cotton and other articles of export would suffer ; and he did not see that wheat would gain any advantage, except perhaps in a few charters. Shipowners would, however, very soon awake to the importance of protecting themselves, by stipulations or otherwise. He said it seemed to have been lost sight of that with wheat a vessel would go down in the water very much more rapidly, and that there were many steamers which would not fill themselves entirely with wheat. That was a very important point to consider. He doubted whether they could look to the difference in the tonnage scale for the fact that the wheat trade of Kurrachee had been able to compete with that of Bombay on more favourable terms than formerly. He believed that the lower rate of railway freight from the interior had more to do with it than the difference in the tonnage scale. The wheat trade in Bombay seemed to be able to extend quite as rapidly as in Kurrachee, despite the difference in the tonnage scale.

The amendment, on being put to the Meeting, was lost, 7 voting for, and 23 against, it. The motion was then carried by a majority of 17 votes.

Mr. Lang then moved the following resolution :—"That the following alterations be made in the Chamber's tonnage scale for steamers, and that the same come into force on the 1st January, 1884 :—Wheat from 16 cwt. to 18 cwt. to the ton ; teel seed from 14 cwt. to 15 cwt. to the ton ; rape seed from 14 cwt. to 16 cwt. to the ton ; mustard seed from 14 cwt. to 16 cwt. to the ton."

Mr. Forrest seconded the resolution, which was carried, 26 being in favour of it and 6 against.

The Meeting then ended.

A SPECIAL GENERAL MEETING of the Chamber of Commerce was held on Friday the 10th August, 1883, to transact the following business :—

1. To consider the Dock Extension scheme recommended to the

Port Trustees for adoption by the Dock Extension Committee and approved of by them.

2. To dispose of any other questions that may be brought forward.

Present :

Mr. JAMES THORBURN, *Chairman, in the Chair.*

Mr. J. P. Cornforth,
 „ T. Meili,
 The Hon'ble W. M. Macaulay,
 Mr. J. Wilson,
 „ C. H. B. Forbes,
 „ F. Hooper,
 „ G. K. Heinrichs,
 „ R. S. Campbell,
 „ G. Cotton,
 „ L. R. W. Forrest,
 „ W. Lang,
 „ N. S. Glazebrook,
 „ C. Macdonald,
 „ D. McIvor,
 „ Vizbookundas Atmaram,
 „ J. Cassels,
 „ F. M. Flower,
 „ O. Got,

Mr. A. Pallis,
 „ M. Mowat,
 „ J. Steiner,
 „ M. R. Wyer,
 „ F. L. Steel,
 „ John Marshall,
 „ Nanabhoy Byramjee Jeejeebhoy,
 „ J. Janni,
 „ T. W. Wood,
 „ E. J. Reid,
 „ F. D. Parker,
 „ C. H. Byrne,
 „ G. E. Ormiston, Resident Engineer Port Trust,
 „ G. Manson, Secretary Port Trust,
 and

Mr. J. GORDON, *Secretary.*

The Notice convening the Meeting having been read by the Secretary,

The Chairman said—Your Committee have invited you to meet to-day to consider the very important question of providing additional wet dock accommodation. Before proceeding to discuss the scheme which has been submitted to us for our consideration by the Trustees of the Port, I propose to refer to a few points connected with the past history of wet docks in Bombay. I have lately been refreshing my memory on the subject by a reference to the records of the Chamber, and very instructive reading I have found them. As many of you now present know, and have occasion to remember, a period of about twenty years passed away from the time wet docks were first proposed before our present dock was commenced. I find this Chamber writing in 1874 in a despairing sort of way to the following effect:—“That during the last twenty years numerous schemes for the formation of wet docks in this harbour have been submitted to Government and considered, but without, however, leading to any

practical result." For the first ten years the question was nibbled at in a sort of timorously spasmodic way, and for the next ten years it was sat upon, in more senses than one, by committees of sorts! At one time it received a forward impetus only to be driven back again by groundless fears or obstructive tactics. It was fought and wrangled over, minuted upon, speechified upon; in fact, it led the life of our famous Ilbert Bill for years. In the course of my reading I came across one or two little passages which made me laugh read in the light of to-day. I propose reading them to you. They are very short and won't detain me a minute:—

"The records of the Dock Committee of 1867 show that the Commodore commanding the station, three experienced commanders of the Peninsula and Oriental S. N. Company and all the medical officers consulted, were opposed to wet docks on sanitary grounds. Captain Graham says:—'I have known Bombay for ten years. An objection to docks is their unhealthiness from stagnation of the enclosed water. The London docks are very offensive.' " Wet docks, according to Captain Methven, would turn the foreshore into an intolerable nuisance, and the Elphinstone Estate into a 'veritable Wapping.'

There were many people even then (1867) in favour of docks, but there were Solomons amongst us in those days who wagged their heads and saw nothing but death and destruction in a wet dock. Impressions and opinions of this sort prevailed in certain quarters, and were recorded for years after 1867. For instance, in 1873 I find the following protest was recorded:—

"After fully weighing all that can be urged on both sides, I desire to place on record that if the scheme, as sanctioned by the Trustees yesterday (that is the Elphinstone bunder scheme—what is now our Prince's Dock), is carried out, the results will, in my opinion, be most disastrous to the health not only of the sailors and others frequenting the docks, but to the health of the town and island of Bombay genererally. This being my firm conviction, I must decline to share the responsibility of any works which will, in my opinion, annually kill hundreds of persons in the town and island of Bombay, who would otherwise live, in order that the trade of the place may be fostered, engineering schemes on a large scale carried out, or the value of the Elphinstone Land Estate increased."

Mr. Mowat—Who is that authority, Mr. Chairman?

The Chairman—Do you think it is advisable to give the authority

I think most of you know who the authority is. I will give you a reference. I am reading from the Chamber's Report for 1873-74 ; perhaps you will look up yourself and see who the authority was. This protest was entered against the construction of the Elphinstone Dock, now known as the Prince's Dock, coupled with the Musjid Basin. Two more years passed away before anything was done, and I firmly believe unless the Government of India had come to the rescue that Bombay would have been without a dock to this day. I daresay we might have had a second edition of the Hog Island Lift for the asking, upon which nearly as much money was spent as afterwards built the Prince's Dock without its accessories, but we could not have such a useless and dangerous toy as a dock without waiting for years and years for it. At length, after the loss of so much time, so many valuable years, the Prince's Dock was commenced towards the end of 1875, and it was finished and the water admitted in April 1879, and it is matter for congratulation to-day that sufficient ground has been found within the limits of the city to bury all the sailors, not to speak of ourselves and the other inhabitants of the town, who were to have been killed off like flies by its construction. (Laughter.) The attitude of this Chamber all through these unhappy years of controversy seems to have been one of anxiety and impatience to get a dock built somewhere or other. True, there was a difference of opinion as to where the dock should be placed, some being in favour of its present site, while others preferred Mody Bay. We were all in favour of having a dock, however. We all saw the urgent necessity for it, and how much it would benefit the commerce of the port. That it has done so all along the line is beyond dispute. That the export grain trade has been fostered and developed in a comparatively short time to a wonderful extent we all know. Why, before we had the dock we used to be almost stone idle during the monsoon. That the dock has been a success in every way is best evidenced by the fact that it had not been well finished and opened, although it has an area of 30 acres, before it was found to be too small. Within about eighteen months from the time it was opened, a Committee of the Trustees had been appointed to consider the best means of enlarging and extending it, and we are met here to-day to consider a scheme which has been approved and passed on to us by the Trustees, which will more than double the accommodation now available. That you will unanimously give your hearty support and assent to the proposed extension I fill very confident. Having for the last few months

sat on the Dock Extension Committee, I may be permitted to refer to some of the points which guided us in recommending for approval the scheme now before us. The Dock Committee began to sit in the end of 1881, and as they settled down to work, fresh schemes and proposals came up, plans and rough estimates for which had to be prepared, involving a good deal of delay. As time passed on, the demand for increased accommodation became more apparent, and proposals involving a larger extension than had at first been thought necessary had to be prepared and gone into. In the end, the scheme now before us, a large plan of which Mr. Ormiston has been good enough to bring here with him, was unanimously approved by the Committee and Trustees alike as being the best and most suitable scheme to carry out. The resolution of the Dock Extension Committee explains pretty fully what the scheme is, and I will get from it the little I have to say about it. The Chairman proceeded to explain by means of the plan the main features of the scheme proposed for acceptance. He observed that many schemes were put before the Committee, and Mody Bay, which many thought a very good site, was not forgotten; but it was found that a Mody Bay scheme would not only take a very long time to make, but it would be very expensive. He found from the estimate for a Dock at Mody Bay, along with a Stilling Basin, which was considered necessary owing to the exposed position of the site, that it would cost 128 lakhs and would take ten years to complete. Another thing about the Mody Bay scheme was this, that a great deal of reclamation would be required there, and all that reclamation would have to be paid for. The Trust had enough land behind the present dock and on the Elphinstone Estate to allow of the construction of a new dock. Another thing which guided the Committee in deciding upon the present site was the great advantage which would be gained by having the two docks together. As a mere matter of safety the arrangement would be an advantage; because if anything went wrong with the gates of either dock they would be able to work both docks through the connecting channel. The arrangement was also desirable because business would be concentrated on one spot, and one establishment would be sufficient to work both docks. They would notice that the new dock would provide quay berths for nineteen vessels. The present Prince's Dock accommodated sixteen vessels, or with the Ibis berth seventeen vessels; so that the new dock would provide more accommodation than the present one. They

would notice that the jetties in the new dock were 400 feet long. The Trustees had another scheme before them, which provided two long jetties, 700 or 750 feet long ; but they found it necessary to have the basins very much wider, because four vessels would have to be worked in each basin and they would require a great deal of room. Another important point, and one they had fully considered, was that provision would be made for the lowering of the sill of the dock by two feet, and the floor would also be two feet lower. Very little inconvenience had been felt in the Prince's Dock as yet in lightening ships. When vessels drawing too much water had been loaded up to a certain point, lighters followed them out into the stream and loaded them up there. The point had, however, been attended to in the new dock, and in view of the fact that larger ships were coming out every year, it would be a question for consideration hereafter whether the channel should not also be deepened. Another advantage of the new dock to which he would refer was the fact that the jetties were so planned as to allow of the full force of the breeze reaching the centre of the dock. This, if not an advantage, would be a comfort to those who had business to do in the dock. The connection between the two docks was also valuable because it would enable vessels to be worked from one dock into the other if necessary. He might mention that no careful plans or estimates had yet been made in connection with the scheme. They had an infinite number of plans and schemes to consider one way and another, and all that Mr. Ormiston had been able to do was to make a preliminary plan and a rough estimate. If they approved of the scheme it would be sent on to Government, and in the meantime, as soon as the monsoon was over, Mr. Ormiston would take borings and arrive at a correct estimate of what the dock was likely to cost. The cost of the Prince's Dock, if he remembered rightly, was close upon 89 lakhs. Four-and-a-half lakhs, nearly, came off this amount for material, which was debited to the Mody Bay Reclamation. The rough estimate of the new scheme, was, therefore, rather less than the cost of the Prince's Dock, in addition to which it provided rather more accommodation. They would notice that it was estimated the new dock would take five years to complete. That was also a rough estimate. Whether the work would take that time or not remained to be seen. The Prince's Dock was finished in three and a half years, and it was to be hoped that the new dock would be completed as soon if not sooner. He (the Chairman) was sure that those interested in mercantile affairs would be very glad if the work could

be completed very speedily. He would conclude what he had to say by proposing the resolution, which was to the following effect :—"That the Chamber approves of the Dock Extension Scheme recommended to the Port Trustees for adoption by the Dock Extension Committee, and approved of by them at a meeting held on the 12th July. The Chamber observes from the plans that it is expected the whole scheme will take five years to complete ; and as increased accommodation is now very urgently required, it trusts that the work will be begun as soon as possible, and that the dock will be finished without any avoidable delay." The members of the Chamber would see that the resolution which he had read slightly modified the terms of the resolution which the Committee passed. An idea prevailed in some quarters that it might not be advisable to suggest the completion of one portion of the scheme before the other ; and as the passing of a resolution containing such a suggestion might have an effect which it would be as well to avoid, he had modified the terms of the original resolution. The reason that he had made the suggestion that one portion of the work might be completed before the other was that the Sub-Committee thought that one section of the work might be completed sooner than the other, whilst at the same time the other section was being pushed on. Of course, if it was found that both sections could be completed in the same space of time it would be better.

Mr. L. R. W. Forrest said that he had much pleasure in seconding the revised resolution proposed by Mr. Thorburn, and that he did not think they would find any difficulty in persuading them to carry it unanimously, as they would not be afflicted with the doubts and fears which troubled their ancestors, and which the Chairman had so graphically described. Although they had not themselves any doubt of the necessity of a new dock, yet they must convince the Government and express a reason for the faith that was in them. He hoped that the time occupied in constructing the new dock would not be anything near the five years suggested by the Trustees, and he thought that the interest on any sum paid to the contractor for constructing it in three years would be amply recouped by the working of the dock in the years thus saved. He asked them to have confidence in themselves, in the great future of the port, and in the measureless extension of the trade and commerce of this country as it became more and more opened out. The urgent necessity of the dock was shown by the present condition of the harbour. Whether it was silting up in the northern end he did not know, but every year the large steamers which came out

found it more and more difficult to get suitable berths. The pressure was of course greatest in the months of May and June, when the monsoon roll was setting in, and nearly every firm knew by painful experience how difficult it had been to discharge and load vessels that had to be a long way out in consequence of their being no room in the dock, or good berths available near the land. With the increased work on all the railways, the great addition in the steam tonnage coming to this port, the yearly increase in the mill-spinning in Bombay and in this Presidency, the import of coals was increasing most extraordinarily. The average of the two last years was about 450,000 tons of coal imported into Bombay, and this year it had already exceeded 400,000 tons, although they were only in the month of August. If they charged only 8 annas a ton, they would pay more than half interest on the new dock, and consider the saving in time of discharging. Daily two or three hours of the best part of the day were lost in getting off coolies to the steamers. They should wipe away from this port the reproach of being one of the worst in the world for the discharge of coal steamers. The members of the Chamber were not, as a rule, given to much public speaking, and they seldom used the few opportunities that they had of expressing their views on public questions; but the action of Government as regards railways was so intimately connected with our trade, with the development of commerce, with the question as to whether they should venture into fresh extensions of dock accommodation, that it would be almost culpable if they neglected the opportunity of expressing their surprise at the supineness of Government in the matter of railway extension. Must they year after year sit there and watch America make more railways in one year than India in 18? It was just twelve months ago, since the G. I. P. Railway Company were on the point of availing themselves of cheap money at home to get up an extension to Cawnpore, when the restriction of Government obliged them to withdraw, and nothing had, so far as he was aware, yet been done. None of them would believe that had Government been as anxious to promote the line as they ought to have been—considering the benefits that would have been rendered not only to the G. I. P. Railway and the country through which it passed, but also to the port of Bombay—they could not have made such concessions as would have allowed the company to have been formed at that time, so that the line might by this time have been on its way to completion. The morning mail had brought in the report of Mr. Keswick's speech at

the Calcutta Chamber of Commerce Meeting. His remarks were so appropriate to the subject now under consideration that he hoped the Meeting would excuse his quoting from them. Mr. Keswick said,—“The delay in the extension of railways in India is deplorable, and the time wasted in references to so many authorities in the endeavour to make antagonistic elements agree almost culpable. The Committee might well say that, unless some simpler system than the present one can be devised for dealing with the railway business of Government, it cannot help viewing the future with the gravest apprehension. The Americans prospect, arrange, and construct great lines in half the time that is wasted in arguments between this and the India Office on schemes the desirability, feasibility, and necessity of which are patent to all practical men. It has been well said that if private enterprise is to succeed in the construction of railways in this country, promoters must be assured that protracted delay will not occur in sanctioning the work, for capitalists cannot be asked to hold their money in readiness for an indefinite period, while the local authorities, the provincial Governments, the various departments of the Government of India, and the Secretary of State and his Council, are arguing in an illimitable fashion the *pros* and *cons*.” Then there was the question of the miserable pittance of 2½ crores spent on productive public works. The whole question of extended dock accommodation really rested on their estimate of what Government would do in extending railways, and also increasing the artificial irrigation of the country, either by the creation of canals or encouraging the digging of wells, or the extension of the existing tanks. With their liability to famines, increased reserve of water power was the sole guarantee for the steady continuous conduct of their export trade. In that Presidency the Irrigation Department was doing good work in the Poona division, and they would soon reap the benefit of those works in the increased volume of trade that would flow into Bombay. They must have faith in the gradual spread of liberal and enlightened views on these subjects. The attention of Government had been thoroughly roused to the value of the wheat trade, but they (the Chamber of Commerce) could have done much more in former years towards developing the trade than they have done. By forming standards, by getting analyses of their wheat, and making the admirable results known all over Europe even as Government was doing now; by having the various qualities of their wheat put into the price-currents of the larger markets, they might years ago have increased the trade to something

of its present dimension. Even in 1877 they could hardly find a quotation of Bombay wheat in any Liverpool wheat broker's circular. He hoped they would excuse his having taken up so much time in discussing the wheat question, but it was so intimately bound up with the necessity and advisability of any fresh dock accommodation that it could not be overlooked. He was sure they would agree with him in thinking the sub-committee deserved their best thanks for the trouble they had taken in devising this new scheme. They could only regret that the time occupied had been so long. The Committee, however, knew best whether the period might not have been curtailed, but now that the plans were finished they could only express their satisfaction with them and regard the labours of the Committee with great gratitude. (Applause.)

The Hon'ble W. M. Macaulay said he observed with great satisfaction that the resolution which had been circulated amongst the members had been modified before it was placed before them at that Meeting. He thought it would have been a pity if such persons as entertained views antagonistic to a large scheme should be afforded an opportunity of again pressing their views on the strength of the support which would have been given by that resolution. It would be far better that the Chamber should pass a unanimous resolution, if they could possibly do so ; and he believed that the scheme which was placed before them was deserving of the cordial support of every one interested in the trade of this port. As they all knew, and as was remarked by Mr. Forrest, every one interested in trade had suffered more or less from the want of dock accommodation, within the last two years especially. The Prince's Dock, although it had proved of very great value, was found to be quite inadequate to the requirements of the trade. As they were fully aware, the trade had expended enormously within the last eight years, and he felt certain that it would continue to increase. When some of the railway schemes which were now in hand or under contemplation were completed, the port of Bombay would be benefited very extensively. As to the railway line to Cawnpore, to which Mr Forrest referred, a special resolution, if he (Mr. Macaulay) remembered right, had been passed, urging the Government to grant immediate sanction for its construction. But various difficulties and obstructions had prevented the work being taken in hand, and the project was at present as far as ever from being carried out. The speaker, therefore, ventured to suggest that the Committee of the Chamber should take up this question again, and urge

upon the Government the urgent necessity for completing the line. The completion of the Southern Mahratta Railway was another source from which they might look for increased trade. The extension of the Rajputana line to Ferozepore would also bring a great addition to their trade in oil seeds and other articles. For these reasons he thought that a scheme of, at least, the magnitude recommended by the Sub-Committee should be soon taken in hand, and considering that the Dock Extension Committee had taken about twenty months to come to anything like a resolution on the subject, he thought it would be very well if the Chamber, in forwarding their resolution to the Trustees, were to urge very strongly that the work should be commenced as soon as it was practicable. He believed the money would be forthcoming, and all they wanted to do was to get the sanction of the Government. (Applause.)

Mr. Mowat said that he was very glad to see that Mr. Ormiston, the Port Trust Engineer, was beside the Chairman, because he would be able to assist in answering the questions which he intended putting. In the resolution before them reference was made to beginning one portion of the dock before the other. Would it not be better to employ a greater number of workmen and to commence both portions together? Then as to the Carnac Bunder nuisance. If it was allowed to continue, it would prove seriously detrimental to human life. The Chamber ought to do all in its power to have the nuisance removed to some other locality where it could do little or no injury.

Mr. Lang observed that it was desirable that the scheme should be carried out in its entirety at once rather than by piecemeal, and the Port Trustees ought to urge upon Government the desirability of carrying out the scheme as soon as possible. The Sub-Committee had taken twenty months to mature the scheme, which was rather a long time; and it was to be hoped that Government would not take so long in giving the necessary sanction. The Chamber should represent to the Port Trust that the Government of Bombay should be requested to pass an early resolution on the subject. The dock might be completed sooner than was expected, and if the contractor to whom the work was given completed it earlier than the estimated time, he should be given a handsome bonus. Even £100,000 would be well expended in this way. With the assistance of the electric light, the work of constructing the dock might be carried on during the night as well as the day.

The Chairman said that the question of coals had not been over-

looked in considering the question. He need not tell them that coals were rather dirty materials to be associated with (hear, hear), and the difficulty was to work coals in a dock without damaging other cargo. It was proposed to run a basin out on the Mazagon side of the Prince's Dock, but the Trustees could not get the requisite land from the G. I. P. Railway Company on reasonable terms and they abandoned the idea. They then thought that if the new dock was not entirely occupied with ordinary business, it might be quite possible to set apart one of the basins without interfering with the other business in the dock. He (the Chairman) thought that Mr. Forrest took a rather strong view of the question, because they found that the P. & O. and the B. I. S. N. Companies would never send their coals into dock ; neither would the railways do so. Therefore the only coals which remained to be dealt with were those sold in the open market. Could Mr. Forrest tell them the quantity of coals brought to Bombay for sale to the general public ?

Mr. Forrest—Over 200,000 tons.

The Chairman said that it was an open question whether the coal trade could afford to pay for dock accommodation. Every one knew that when coals came into dock now there was great difficulty in getting them discharged. They were obliged to discharge them into lighters, which were delayed in getting in and out of dock, and besides they could only work one side of a vessel at a time in dock, whereas in the stream they could work two sides at a time. He had heard many people express the opinion that coals could be worked faster in the harbour than in the dock. One point which he omitted to mention in his opening speech was the question of dry dock accommodation. Government had appointed a Committee to consider the question, and the committee of the Port Trust took into consideration whether it was possible to construct a dry dock in connection with this scheme, and they came to the conclusion that it was not advisable to do so. The working of the dry dock would cause so much trouble, and it would take up so much space, that they came to the conclusion that in view of the fact that Government was considering the matter they should not deal with it. With reference to what Mr. Lang said as to the construction of the dock piecemeal, he (the Chairman) was responsible for the paragraph which had been introduced into the resolution of the Committee. It was far from his intention to advocate that the scheme should be carried out piecemeal. What he

thought was that it might be possible to complete one portion before the other, so that their wants might be supplied to a certain extent at the earliest possible moment ; but if the idea was not practicable no one would think of attempting to carry it out. He did not see how the carrying out of one portion of the work would interfere with the execution of the other portion. It was quite true that the more men they put upon the work the faster it would be done ; but they could not put more than a certain number of people upon any work. As regarded the Carnac Bunder nuisance, he thought that would be a very proper question for the Committee to take up in connection with this scheme. He understood that the Port Trust had arrived at some sort of understanding with the Municipality on the matter. A portion of the drainage of the Port Trust property was now carried towards Worlee, and he believed that when the drainage scheme was completed the Carnac Bunder nuisance would cease. He did not know how long the drainage scheme would take to complete, but, from the way in which the Municipal authorities chopped and changed their plans, it was very likely to be a long time before it was executed.

The resolution was then put to the Meeting and carried unanimously.

* A vote of thanks to the Chairman terminated the proceedings.

A SPECIAL GENERAL MEETING of the Chamber of Commerce was held on Wednesday the 5th December, 1883, to transact the following business :—

1. To alter the rules with respect to the election of the Committee to the following effect :—That the Deputy Chairman be elected specially by the new Chairman and the Retiring Committee, and that it is desirable that he should be a merchant ; and, if carried, to make such alternations in the rules under Rule VII. as may be necessary.
2. To alter Rule V. reducing the Subscription of each firm or member of the Chamber from Rs. 20 to Rs. 15 per month.

3. To confirm sundry additions and alternations in the Tonnage Scale, in accordance with ascertained measurements.

Present :

Mr. JAMES THORBURN, *Chairman, in the Chair.*

Mr. J. Dickson,	Mr. A. F. Beaufort,
„ T. Meili,	„ C. Macdonald,
„ J. Tintner,	„ J. L. Mackay,
The Hon'ble W. M. Macaulay,	„ C. H. Byrne,
Mr. J. Wilson,	„ C. Poole,
„ C. H. B. Forbes,	„ J. Fachiri,
„ S. F. Patel,	„ J. Steiner,
„ O. Feidler,	„ M. R. Wyer,
„ G. K. Henrichs,	„ J. Janni,
„ R. S. Campbell,	„ T. W. Wood,
„ Hempson,	„ F. D. Parker,
„ L. R. W. Forrest,	„ F. Bozzoni,
„ W. Lang,	and

Mr. J. GORDON, *Secretary.*

THE MODE OF ELECTING A CHAIRMAN AND DEPUTY CHAIRMAN.

The Chairman said that the first item of business had reference to the election of the Deputy Chairman. The present system, by which the Chairman and Deputy Chairman were nominated together, had not worked well. He therefore moved that the following alteration be made in the rules with respect to the election of the Committee:—“That the Deputy Chairman be elected by the new Chairman and the retiring Committee, and that it is desirable that he should be a merchant; and if carried to make such alterations in the rules under Rule VII. as may be necessary.” Some members, the Chairman remarked, might object to that part of the resolution which stated that the Deputy Chairman should be a merchant, as being invidious. The matter was now, however, before the Meeting, and it would be for any gentleman who might prefer any other mode of election than that proposed to move an amendment.

Mr. Sorabjee Framjee Patel seconded the proposition.

Mr. Lang remarked that it might be considered invidious to their banking, shipping, and railway friends to make it a condition that the Deputy Chairman should be a merchant. He moved an amendment to the following effect:—That a separate ballot be held for the election of Chairman and Deputy Chairman on different days, and that the

rules of the Chamber be altered accordingly; that the election of Chairman should take place first.

Mr. Meili seconded the amendment, saying that it was not desirable that the Deputy Chairman should be a merchant.

Mr. Macdonald supported the amendment, which was carried.

REDUCTION OF SUBSCRIPTIONS.

The Chairman said that lately they had been looking into the financial position of the Chamber and that they had reason to expect there would again be a surplus. They thought that the best way of dealing with the question of the surplus was to reduce the subscriptions from Rs. 20 to Rs. 15, which would absorb about Rs. 3,000. He moved the following resolution, which was seconded by Mr. Forrest and carried:—"That the subscription of each firm or member of the Chamber be reduced from Rs. 20 to Rs. 15 per month."

THE TONNAGE SCALE.

The next business before the Meeting was the consideration of certain proposed additions to, and alterations in, the tonnage scale. The special Committee appointed to consider the question reported that the measurement of the following articles had been tested, with the following results: Salt.—This article was not tested, but according to the custom of the port the scale is 28 Indian maunds of 82 2-7 lbs. to the ton, on quantity shipped, both for steamers and ships, and the Committee agreed that this scale should be adopted. Bone meal and bone dust.—60 bags of bone meal of 210 lbs. each were stowed, being equivalent to 22½ cwt. Buffalo horns in bundles.—30 bundles of 1 cwt. each were stowed; and it was agreed that the scale should be fixed at 6 cwt. for steamers and 8 cwt. for ships. Jowaree, bajree, and lang (in bags).—60 bags of 1¾ cwt. of each of these articles were stowed in the Chamber's box, but, as the last row was swelling out, it was unanimously agreed that 8 bags should be deducted, giving an actual measurement of 18½ cwt. to the ton. Mussoor (in bags).—60 bags of 1¾ cwt. were stowed in the Chamber's box, but, as the last row was swelling out, it was unanimously agreed that 4 bags should be deducted, giving an actual measurement of 19½ cwt. to the ton. Mowra flowers.—64 bags of 180 lbs. each were stowed in the Chamber's box, giving an actual measurement of 20½ cwt. to the ton. Ground-nuts (unshelled).—36 bags of 84 lbs. each were stowed in the box, and there was space for about 4 bags more, altogether 40 bags of 84 lbs., equal to 3,360 lbs. = 6 cwt. to the ton.

Rice (table rice in Calcutta).—60 bags of $1\frac{1}{2}$ cwt. each were stowed in the box, and it was agreed that the scale should be fixed at 18 cwt. to the ton for steamers.

The Chairman said that some of them would remember that in 1881 a Special Committee was appointed to deal with the question of the tonnage scale, and that they made certain recommendations which were approved of by the Chamber. Letters had also been received at different times bringing to the notice of the Committee the fact that certain articles which were not included in the tonnage scale should be measured. The present list divided itself into two branches, namely, additions and alterations. He would in the first place move the adoption of the additions proposed, which were as follow :—

	Steamers.				Ships.			
	To the ton.				To the ton.			
Salt	28	Ind. mds. of			28	Ind. mds. of		
		82 $\frac{1}{2}$ lbs.				82 $\frac{1}{2}$ lbs.		
Bone meal and bone dust.	20	cwt.	...	...	20	cwt.		
Buffalo horns in bundles.	6	„	...	...	8	„		
Ground-nuts (unshelled).	6	„	...	...	8	„		

Mr. Fachiri seconded the proposition.

Mr. Parker, on rising to oppose the proposition, said he would not detain the Meeting by repeating former arguments, as the question had lately been very clearly put before them in one of the local newspapers by Mr. Janni. Shipowners took their standpoint on this—that the largest known tonnage was 20 cwts., or by measurement 50 feet, and that consequently a ton of 18 cwts. was equivalent to a measurement of 45 feet and 16 cwts. to 40 feet. The Chamber, however, wished to impose upon them 18 cwts., and even in some cases 20 cwts. as being equivalent to 40 feet. That was an injustice not only to shipowners but to cotton shippers and others, because if the new tonnage scale came into force they would have to pay $12\frac{1}{2}$ per cent extra freight without receiving any advantage for it. For if a shipowner were prepared to charter a steamer at 32s. now, he would, when the new scale came in force, raise his terms to 36s. This would not matter to the shippers of wheat and seeds, as they would get extra space for the extra freight, while cotton shippers would continue to pay upon 40 cubic feet. This was a point which he thought had quite escaped attention at the last Meeting. The proposed alteration in the tonnage scale had been opposed from the first by the representatives of the shipowners in Bombay, and more strongly by their

principals in London. The shipowners could not agree to any alteration in the scale of the kind contemplated by the Chamber, as they had not been consulted at all in the matter. Had that been done, it was possible that an arrangement could have been arrived at which would be satisfactory to all parties. Instead of that, the Chamber had laid down a law which he was afraid they would find it difficult to enforce. Since the last Meeting which had been held on the subject, the representatives of the shipowners in Bombay had sent a protest to the Committee, besides which numerous representations had been received from London. When Mr. Mowat's Committee sat, the documents were printed and circulated immediately; and these papers ought to have been treated in the same manner, but they were not. The protests from the Shipowners' Association had not only not been circulated, but had been lost.

The Chairman—They were circulated, but unfortunately they have, as you say, been lost.

Mr. Parker, continuing, said he did not think that all the members of the Chamber had seen the documents. It was certainly a very strange circumstance that important documents like the protests of the Shipowners' Association should be lost. No copies of them had been kept in the Chamber. If they had been printed this accident would have been avoided. Nothing, Mr. Parker continued, had occurred in that Chamber to cause so much ill-feeling and discord as the tonnage scale. It was desirable that they should avoid this dissension, as it was calculated to bring about a state of things which would lessen the influence and importance of the Chamber. When the representatives in Bombay became aware that protests had been sent from the shipowners in London, they had urged the Committee to recommend the Chamber to reconsider their decision, or at any rate to hold it in abeyance. He strongly urged that this course should be adopted now, as he considered it to be very desirable in the interests of the trade of the port. He then moved the following amendment:—"That in any addition to the tonnage scale the present or old basis for ship and steamer tonnage shall be adhered to." He added that the amendment was supported by the P. and O. Company, the B. I. S. N. Company, the owners of the Hall Line, Messrs. Bates and Co., the Austrian-Lloyd's S. N. Company, the Rubbattino Company, the owners of the Clan Line, &c.

Mr. Mackay seconded the amendment. He said it would be a

great pity if the Chamber made use of its majority to override the views of those members who were interested in the shipping. He found that the letter which was addressed to the Chamber, suggesting that the proposed additions should be made to the tonnage scale, bore the signatures of 25 gentlemen, ten of whom had not exported a single cargo of the articles mentioned in the list during the last six months. He certainly thought that in a matter of this sort members of the Chamber who were not interested in the export of those articles should not vote. In the same way, he would not, where there was a question of principle involved in regard to piece-goods, vote either one way or the other. He thought it would be very much better, as Mr. Parker had said, if a Committee of representative shipowners and merchants were appointed and allowed to decide as to what the scale should be. The sea, he said, was a highway, on which there was no monopoly, and arguments which applied to the reduction of railway rates, where there was a monopoly, did not apply to steamer freights.

Mr. Wilson said it was hardly fair to put down 20 cwts. of bone meal to the ton for steamers and ships.

Mr. Lang contended that Mr. Parker's remarks had no bearing on the subject at present under discussion, as the question to which they applied had long been settled. He did not think it was fair for gentlemen who had been defeated once to endeavour by a side-wind to get up a second discussion. It was always open for them to express their views in the Chamber, and if possible to carry conviction with them. Mr. Parker's remarks were merely a *resumé* of what he had stated on a former occasion; and they had no bearing at all on the present question.

After some further discussion, the amendment was put to the Meeting and lost. The original proposition was then carried.

The Chairman said that in reference to the remarks which had fallen from Mr. Parker about the loss of some of the documents, he would say that there had not been the slightest disinclination on the part of the Committee to show those documents to the members. He had been told that most of the members had seen the papers. They were now unfortunately lost; but he hoped they would turn up at some future date.

The Meeting next proceeded to consider certain other alterations in the tonnage scale.

The Chairman proposed that "jowaree, bajree, and lang be taken

at 18 cwt. to the ton for steamers and 20 cwt. for ships ; mussoor (in bags) at 20 cwt. for steamers and ships ; mowra flowers at 20 cwt. for steamers and ships ; and rice at 18 cwt. for steamers and 20 cwt. for ships.

Mr. Wyer seconded the resolution.

Mr. Lang proposed, and Mr. Fachiri seconded, an amendment, "That the alterations be accepted, with the exception that mowra flowers be taken at 18 cwt. to the ton for steamers and 20 cwt. for ships."

Mr. Parker proposed, and Mr. Mackay seconded, an amendment, "That in any alteration to the tonnage scale, the present or old basis should be adhered to."

Seven voted in favour of the last amendment, and eleven against it.

Mr. Lang's amendment was then carried.

The Meeting then separated.

The ANNUAL GENERAL MEETING of the Chamber of Commerce was held on Wednesday the 19th December, 1883, to receive the report of the outgoing Committee, and to discuss any other questions that may be brought forward.

Present :

Mr. JAMES THORBURN, *Chairman, in the Chair.*

Mr. J. Dickson,	Mr. C. Macdonald,
„ T. Meili,	„ J. L. Mackay,
The Hon'ble W. M. Macaulay,	„ Vizbhookundas Atmaram,
Mr. J. L. Symons,	„ C. Poole,
„ C. H. B. Forbes,	„ C. H. Byrne,
„ O. Feidler,	„ J. Fachiri,
„ F. Forbes Adam,	„ J. Steiner,
„ R. S. Campbell,	„ M. R. Wyer,
„ G. Cotton,	„ J. Janni,
„ L. R. W. Forrest,	„ T. W. Wood,
„ W. Lang,	„ C. Lowell,
„ G. W. Moir,	„ E. J. Reid,
„ A. F. Beaufort,	„ F. D. Parker, and

Mr. JOHN GORDON, *Secretary.*

ELECTION OF A NEW MEMBER.

The Notice convening the Meeting having been read, Mr. Lowell proposed, and Mr. Meili seconded, that Messrs. Louis Dreyfus and Co .

be elected members of the Chamber. On a ballot being taken, the proposition was declared to be unanimously carried.

The Chairman in moving the adoption of the Committee's report for the past year said : Gentlemen,—Before I move the adoption of the report of your Committee for the year which has just ended, I should like to touch upon one or two of the leading topics which have engaged our attention during the past year. Those of you who have glanced through the report, which has been in the hands of members during the last few days, will have seen that there are two or three subjects which we considered the most pressing, and which have engaged a great deal of our time and attention. The question of the grain rates on the railways is the first subject that is dealt with in the report. When we accepted office we found that the previous Committee had been engaged in corresponding with Government and the G. I. P. Railway Company on the question of getting the rates for the conveyance of grain reduced. In the case of the Rajputana-Malwa Railway we had to wait for a long time for an answer to the last letter addressed to Government on the subject. We at length again moved in the matter, and ultimately the Government of India dealt with the question by reducing the rates to 11 annas and 11½ annas respectively. The reduction had a very important effect upon our grain trade, for during the five months from May to October we received fully five times as much wheat as we did during the corresponding months of the previous year, and that notwithstanding the fact that the B. B. and C. I. Railway was breached for nearly a whole month. We also made a suggestion as to the advisability of the Rajputana-Malwa Railway being placed under the management of the B. B. and C. I. Railway. The Bombay Government, however, did not then approve of it, as they thought that the management of the Rajputana-Malwa Railway was very good, and that there was no necessity for taking up that point. But I feel warranted in saying that now not only the Supreme Government, but the Bombay Government also, would approve of such a transfer being made. I therefore hope the new Committee, when they enter on their duties, will take steps to follow up the suggestion. I daresay most of you have heard that it is proposed to double the present narrow gauge railway, instead of lifting it and substituting a broad-gauge line. I think you will all agree with me that it would be very much better if the railway were in the hands of the B. B. and C. I. Railway, for in a few years we might look forward to having a broad instead of a narrow

gauge. You will remember that the G. I. P. Railway raised their grain rates in 1881. We had a lengthened correspondence with the Company, but our representations met with little success. We did not seem to be able to convince the Company of the advisability of lowering their rates. In June last we received a letter which rather surprised and struck the Committee from the home board of the Company addressed to the Under-Secretary to the Government of India. It struck us as being such a singular letter that we appointed a Special Committee to deal with it. Immediately after our reply to that letter had gone in, the G. I. P. Railway Company voluntarily reduced their rates to the extent of about 13½ per cent. from some of their stations. Following up what we had written, we suggested the propriety of reducing the rates from the other stations, and we hope they will see their way to do so. That, gentlemen, is all I have got to say about the grain-rate question. The next point I would like to touch upon is the question of the development of the wheat and cereal trade. You will have noticed from Messrs. Macdougall and Company's report that the quality of Indian wheat has been completely established, so that there should be no difficulty in getting the wheats of this country into all the European markets. Government appreciated our efforts to further the trade in Indian wheat, and lately came forward with offers of money to encourage its cultivation. There is just one remark I should like to make in connection with this subject. It has reference to the suggestion we made to the G. I. P. Railway Company as to the necessity of doubling their line from Bhosawal to Nagpore. Before they reduced their rates, the line was blocked by large quantities of grain. On inquiring into the matter we found they did not have sufficient power to move all the grain which was then offering, and we suggested the doubling of the line and its better equipment with rolling-stock. The next question to which I would like to refer is perhaps the most important of all. It is the question of internal communications. I think you will all agree with me that, from a mercantile as well as an Imperial point of view, it is of the utmost importance that the country should be opened up by railways. There are several projects in progress and under discussion which, if carried out, will materially benefit the trade of the port. There is, for instance, the project for opening up the Southern Mahratta Country, from which we are certain to derive much benefit. I hope that the survey of the Rutlam-Godra extension will be succeeded by its sanction, and that the line will be pushed

further into the interior in the course of time. Then there are several other projects which concern us much. The first one to which I intend to allude does not directly concern us, but it does in an indirect way, and that is the Maneckpore-Jhansi extension of the East Indian Railway. There is nobody, I understand, who objects to that line. The authorities are united in their approval of it, and I believe also that the Secretary of State approves of it. But there is that everlasting narrow-gauge party who wish to have it laid on the narrow-gauge. It was with a view to prevent such a mistake being committed that we took up the matter; and I think the new Committee should express a strong opinion against the narrow-gauge, for it follows that if that line be made narrow-gauge the extension from Bhopal to Gwalior will be on the same gauge. I have some authority for saying that it would be well for the Chamber to emphasize what we have written on that point, by passing resolutions at a Special Meeting which might be called shortly to consider the subject. The extension from Bhopal to Gwalior is a project which very much concerns Bombay, and it would be a fearful mistake if it came to be laid on the narrow, instead of the broad, gauge. I believe there is no difference of opinion amongst the authorities here as to the broad-gauge question, but there is, I am sorry to say, a difference elsewhere. I think the stronger the position we take up in regard to the question the more likely we are to strengthen the hands of the authorities here. Another project in the direction of railway extension is that for connecting Calcutta with Bombay through Nagpore. You may remember that some years ago we protested very strongly against the extension from Nagpore to Raipur being laid on the narrow-gauge. At that time we had to be contented with the answer that the Secretary of State had already given his sanction to the construction of the line on that gauge. Now that the question of extending it to Calcutta has cropped up, there is a repetition of the old story—laying a link of narrow gauge between two links of broad-gauge. I understand there is no difference of opinion out here as to the propriety of making the connection on the broad-gauge. But there is a clique, if I may use the term, who wish to have the narrow gauge laid there also. These are the principal topics we have had to deal with. There are a number of minor points to be glanced at, but I will not detain you for any length of time. The first is the question of the Petroleum Act. You will remember it came before us frequently last year. The draft rules under the Act were submit-

ted to us, and we appointed a Sub-Committee to consider them. But the Government have done nothing yet to put them in force, and the matter remains in the same position as before. In connection with the petroleum trade there is one point to which I should like to allude—the B. B. & C. I. Railway, taking the initiative at the instance of the Chamber, and the G. I. P. Railway following, the rates for carrying petroleum have been reduced. The effect of this, I hope, will be to increase the consumption of petroleum in the interior. We lately wrote to the G. I. P. Railway inviting them to reduce their rates for carrying piece-goods to the same level as those obtaining on the B. B. & C. I. Railway and nearly all the other railways. We do not yet know what may be the result of our representations, but I hope we shall receive a favourable answer shortly. Any little concession in this direction enables merchants to push goods further into the interior, and thereby increase the trade of the country. I would now like to say a word about the proposed new dock. You will be glad to hear that the plans are now in a forward state, and that as soon as they are completed, Government will be asked to sanction the construction of the dock. I hope that no obstacles will come in the way to prevent the work being commenced very soon. The financial question has of course to be settled. But the Port Trust is so strong, and its financial condition is so sound, that there ought to be no difficulty in arranging for the money required. The next question I must make an allusion to is that of the alteration of the tonnage scale. It has become a burning question—a sort of Ilbert Bill amongst us. (A laugh.) I do not intend to say very much about it. Some correspondence has just passed between the Committee and the representatives of the steam-ship lines, but I do not think it necessary to read it to this Meeting. Your Committee, being aware of the determination of a minority of the members of the Chamber not to recognise the new scale, lately wrote to the representatives of the Lines with the view of bringing about some sort of settlement, and asked them if they would recognise the new scale on the understanding that the Committee would suggest to the Chamber the propriety of appointing representatives to attend a meeting at home with the view of arranging a uniform tonnage scale for all India. A reply, which is too long to read, was yesterday received, suggesting that the Committee should submit the following resolution to this Meeting:—“That having regard to the strong protests from the leading ship-owners of Great Britain and the Continent against the alternation of

the Bombay tonnage scale, and also to the fact that the representatives of the interests of shippers are now in great majority in this Chamber, it be decided to continue the old or present steam tonnage scale till 30th June, 1884, and that in the meantime a Committee be appointed by the Chamber which will fairly represent both the interests of steamship owners and shippers, to consider the present tonnage scale, and report to the Chamber thereon. The decision of the Committee to be binding on both parties." I would like to state in the first place that it is not competent for me under the rules of the Chamber to submit the resolution to the Meeting. I wish also to say that the question is not and never was a Committee one. A number of the members of the Chamber brought the question up by a requisition addressed to me as Chairman, and it was decided by a large majority to alter the scale. That being so, I feel that any reconsideration of the decision arrived at should be brought before the Chamber by requisition as provided for in our rules. That is the regular and proper course to pursue, and I take leave of the subject by putting that aspect of the case before you. The question of quarantine in Egypt has also occupied the attention of the Committee. You remember the inconvenience we suffered from the imposition of quarantine last year. Well, we have had it all over again this year. But I hope the strong remonstrance we sent in, and which Government supported, will have the effect of leading to the abolition of the International Sanitary Board, which seems to be a perfectly irresponsible body, and which acts in a very extraordinary and arbitrary manner. Another burning question which I propose to touch upon—and that very gingerly—is the Criminal Jurisdiction Bill. I should recall to your recollection that in March last we had a General Meeting to consider the subject, and that we memorialised the Viceroy against it. None of us liked the Bill, and most, if not all, of us would be glad if it had been dropped altogether. The authorities seem to hold a different opinion; but they have modified the terms of the Bill, and have pared it down to such an extent that it has almost become invisible. I don't like the Bill and never did, but I question the wisdom and propriety in the interests of good Government of assuming and continuing such a thoroughly hostile attitude to the measure in any shape or form as we are now witnessing in many parts of the country. With regard to the Calcutta International Exhibition, about which there is a paragraph in the report, I hope that some good will come of it to the trade of the country, although it is not

very visible just at the present moment. At least a good many people seem to think it is more of a fancy show than an Exhibition calculated to extend or benefit the trade and commerce of the country. There is just one point—and it is a personal one—to which I would wish to refer. You all know that I considered it necessary to retire from the presidency of the Exhibition Committee. I do not now wish to give you the reasons which guided me on that occasion—they are, I think, pretty well known to all of you—but I take the liberty to say that I think that future Committees should be careful to protect themselves and the officers of the Chamber against being drawn into the position we found ourselves in lately, because it is not encouraging, after you have accepted office in good faith, to be dealt with as I and those associated with me were treated. (Applause.) Our revenue is something like Rs. 8,000 in excess of our expenditure, and in the year just ended our funds have been brought up to Rs. 52,000. You remember that we reduced the subscriptions of members the other day to an extent that will absorb not quite half of the surplus. We have also given an increase of salary to the office establishment. There will, however, be still a margin next year, though the surplus of Rs. 8,000 will be considerably reduced. I will now move the following resolution :—“That the report of the Committee, which has been circulated, be received with thanks and printed for general information, together with the documents therein referred to ; and that the members of the retiring Committee do receive the thanks of the Chamber for their attention to its interests during the year of office now closed.” (Applause.)

Mr. F. Forbes Adam, in seconding the resolution, said : Gentlemen,—I have listened with much interest to Mr. Thorburn's speech. Any one who has read the report, and followed his allusions to the various questions of importance that have claimed the attention of the Committee, cannot but feel that the past year has been a more than usually eventful one, and that each subject affecting our commercial community, as it has come to the front, has been treated ably and in a way to call for our gratitude. The practice steadily pursued of publishing in the daily papers all letters issued by the Committee on matters of moment is a capital one. It affords opportunities to those who are not immediately connected with the work going on to acquaint themselves in the leisure hours of the morning with what is being done, and enables them to assist the Committee by information, suggestions, or cri-

ticism when their particular affairs are touched or when they may be in possession of special knowledge bearing on topics on hand. Speaking as one who has had the honour to be chosen by you to occupy the position of Chairman in the coming year, I would urge on all members that they should keep a watchful eye on current events, and hurry to bring to the notice of the Committee of the Chamber any subject that they consider requires attention on behalf of individual merchants or of the body commercial. It must have been exceedingly gratifying to all who have the welfare of India at heart to follow the unremitting pleasure that has been brought to bear on the question of the reduction of rates over the existing lines of railway, and the extension of the railway system boldly and unhesitatingly on the broad-gauge plan. We are fortunate in having the Government of India and the Local Government at one with us, and experienced engineers of eminence, such as Stanton, Hancock and Bonus, are also on our side. Yet the movement lags. The home authorities impede the way. It is surely altogether wrong that those who are on the spot, who best understand the requirements of the country, and who are most competent to form correct judgments, have not the power to give effect to their carefully considered schemes, but must submit to be checked and thwarted by a body of men who, illustrious no doubt and covered with the well-earned honours of the past, are not witnesses of the changes going on around us, and bring to the discussion of every topic minds that cannot be but prejudiced and judgments that cannot be but biassed by influences inimical to fair and impartial views of the issues at stake. If there is any country that calls for a Government by men on the spot it is India. It will be a bad day for us if party exigencies should ever sway the policy that guides and directs the affairs of this country, or if the matured recommendations of our administrators should be over-ridden at the bidding of the ignorance, inexperience, and self-interest of home-bred politicians. To me it seems, gentlemen, that a wide and rapid extension of our railway system is indispensable to the advancement of India—economically, financially and politically it is wise. Think of what would be the result of an expenditure of 50 millions. Immense tracts, now neglected in great part as they can find no market, would be opened up and their produce transported for shipment to foreign ports. Money would come back, a demand for the manufactures of Britain would be stimulated and increased, the necessities of sea carriage augmented, the country gradually enriched, and security against famine strength-

ened. Surely we may well call on the Chambers of Commerce of England to join in our cry of railways, railways, more railways. But how are we to get them? Major Baring, an able, wise, and diligent Minister, who was rapidly mastering the difficult problems of Indian finance, and whose removal might be described, without disrespect to his successor, to have been a loss to the country, strongly advocated when he first entered on office the extension of railways by private enterprise. But private enterprise is a plant of too slow a growth to meet the wants of the case. European capitalists prefer to invest their money closer to their headquarters. Those who come hither to make money, when they have made it, for the most part retire and take it with them, unless they are tempted by ventures that possess possibilities of yielding great returns, and results come too tardily and at too low a rate of interest to attract the richer natives. No, Gentlemen, a limited Government guarantee is what is really suited for India. Backed by that, money obtained at a moderate cost would quickly flow in, and the thrice blessed work would proceed. But here comes in the question of gauges. I believe we are every day getting fresh evidence of the folly of constructing important lines, for the sake of a pitiful saving in first cost, on a narrower than what is called the broad-gauge. There may of course be districts for which the narrow-gauge is enough. For instance, the Bhownuggur State, whose line feeds its own port and is presumably sufficient to carry the utmost possible development of traffic. But these are few and far between. It is not a great exaggeration to say that the best thing that could happen to the Bombay Presidency would be to see every inch of narrow-gauge taken up and replaced by broad, and all new lines planned for on the broad-gauge principle. Never mind the cost, that will be amply repaid hereafter. But do not let us have traffic delayed and interrupted, and a check given to the full and free development of the resources of this magnificent country by having lines made that in some cases may meet the needs of to-day, but that passing through lands in which the very fact of there being a railway means rapid and rich development, will prove in a short time inadequate, unsatisfactory, and disappointing. Grant India a great railway development on the broad-gauge, and charging rates on trunk lines that can never be said to have reached the lowest point compatible with sound business, till the utmost carrying capacity over double lines has been touched, and we may allow ourselves to look for the realization of the sanguine

dreams of the future of an India unharassed by wars and famine, of that talented Civilian, Sir John Strachey, to whom was lately most generously ascribed by Sir Evelyn Baring the initiation of the financial reforms that he himself has so successfully carried out. It is sad to feel that the fulfilment of Sir John's dreams may be frustrated by the influence of his doctrinaire brother. General Strachey in spite of overwhelming evidence to the contrary, stubbornly adheres to his theory that the narrow-gauge is the best for India. I venture to predict he will not escape at the hands of the historian of our times, deserved condemnation, as a man who, whatever his other virtues—and we are willing to credit him with many—was persistently wrong-headed, and who, in all honesty let it be said, did more to retard the progress of the country he professed to benefit than any influential man of the day. Would that my feeble voice could reach him in his place in Council and that he would give ear. But alas! gentlemen, it is, I fear, hopeless. He has listened to no arguments but his own for 20 years! (Laughter and applause.) From railways it is natural to pass to freights. The battle of the gauges reminds us of the battle of the scales, which is also being fought, but which I trust may soon be settled. I have always held that it was a pity the proposal for a new scale was made. The old scale was not correct, but we had settled down to it, and nothing could be gained by alternation. If I recollect rightly, Mr. Magnus Mowat, in July last, when the proposal was discussed by a General Meeting of the Chamber, urged with his accustomed eloquence that the trade of India in wheat was handicapped to the extent of about half a crown a ton by the old scale, which simply went unduly into the pockets of shipowners. But a moment's reflection must have convinced any one who had a schoolboy's acquaintance with ordinary economic rules that this was quite erroneous. It matters nothing whether the ton be 10 or 20 or 30 cwts.; rates, after a certain transition period, must, in the play of competition, and governed by the laws of supply and demand, inevitably adjust themselves. These laws are secret and silent in their action, but sure as the rising and setting of the sun, and you cannot evade them. Another argument used was that merchants by the change would be able to charter steamers for full cargoes of lawful merchandise without stipulating for any special description, but this also would have been arranged in the rate. Steamers could have been and actually were chartered at so much all round for lawful merchandise, and so

much less if a certain quantity of wheat were guaranteed. There was no need to change the tonnage scale to overcome that difficulty, and certainly not to do so without affording time to shipowners at home, who have no representatives here, and who seem to attach great importance to the matter to express themselves. To my mind the interests of shipowners and shippers are identical. Anything brought out beneficial to the development of Bombay trade must advantage equally both. But neither the trade of Bombay nor shipowners nor shippers could derive benefit from a tonnage scale alteration, and therefore I think it was perhaps a pity for a majority of shippers to insist on introducing a measure, useless in itself, and that could not but cause bad feeling, misunderstanding, and an inconvenience, which, I hope, may, for the sake of all of us, soon pass away. I am afraid, gentlemen, I have detained you too long. It is tempting to refer to a new dock, a new Suez Canal and the prospect of reduction in rates of both, which will so greatly assist us to compete with America for the wheat trade of Europe. Also to the Calcutta Exhibition, which must bring India productions of all sorts more prominently into notice. But I will leave these and confine myself to one other subject—the much abused and tiresome Ilbert Bill. Lord Ripon came to this country earnestly desirous of promoting its welfare. What he did at first was received without disapproval by Anglo-Indians and with much applause on the part of natives. Carried away, and anxious for fresh honours, he hastily—without waiting to hear the views of those to be chiefly affected, without obtaining the trustworthy opinions from all sources that he has since laboriously gathered in—brought forward a measure that at once raised on the other side of India a wild storm of vituperative remonstrance, and called forth protests from all parts of the country. To the many who, like myself, have lived for years in the Presidencies of Bombay and Bengal, and have the pleasure to number among friends native gentlemen of integrity and culture, it was painful to hear of the unworthy and reprehensible language that characterized the speeches of the leaders of the opposition in Calcutta. That language engendered much bitterness of feeling. It made a bill of some sort almost unavoidable, but at the same time it led to a movement that has had the result of bringing about a great modification of the original proposal. We were all agreed on this side of India that the bill was uncalled for, and this was admitted even by thoughtful and intelligent natives. But that stage has been

passed, and we must now take stock of the position and look ahead. If it be true that the bill in its modified form is to become law, as we hear, is fixed, and if it does become law, I sincerely trust agitation will cease, and that we will be allowed to settle quietly down and to forget what has happened, so that all ill-feeling may die out. I think the wives and children of Anglo-Indians in isolated parts of the Punjab and the most distant districts of Assam, need now have no fear. Native gentlemen, who have qualified themselves by home examinations and worked up through various grades, till they have become Sessions Judges and District Magistrates, may safely be accorded full powers. There is no danger of going further for a long time to come. But we must always bear in mind that Lord Ripon took no new departure. He wanted to go too far and too fast, but the path he was on was long ago opened up. When, with the approval of all right-thinking men, Government spread education among the natives, and thereby sowed the seeds of new ideas and new aspirations, when natives were first admitted to competitive Civil Service examinations, we entered on a road that all independent-minded, disinterested men must agree, we are, in justice, bound to continue to travel over, and that we may travel over without misgiving and without apprehension. Slowly, of course, the more slowly the better for the true interests of the country, but forward we must go, and it will be well for all of us, whether known or unknown, influential or humble, so to live each our lives, that over the length and breadth of the land, good understanding and mutual appreciation may grow apace and prepare the way for the next step when it comes, as at some distant time it inevitably must—not in our time but in the far future. We may then look forward with confidence and hope to the days when natives and Europeans will work side by side in administering the affairs of a happy, loyal, prosperous and contented land, destined to remain through the centuries before us the most splendid and glorious dependency of the British Crown. (Applause.)

The Report was then unanimously adopted.

Mr. L. R. W. Forrest said—Allow me on behalf of the Committee to tender thanks to Mr. Forbes Adam for the unusually kind manner in which he has spoken of our labours. The question of the cultivation of wheat, and also that of the extension of Railways, both of which have so particularly interested the present Committee will,

I am sure, be strongly advocated by Mr. Forbes Adam. I am sure, also, we may congratulate the Chamber upon having obtained the services of Mr. Forbes Adam as Chairman. It is a satisfaction to me, who am now definitely retiring from the Committee, on which I have sat with much pleasure for the last twenty months, to leave the questions which have occupied our attention in the hands of the new Chairman. I would urge the Chamber to take a more and more active part in the economic questions which agitate this country, and I feel certain that the more energetic they are, the more they will receive the support of the Government and the people generally. (Hear, hear.)

Mr. Forrest, again rising, said—I have much pleasure in proposing that Major L. Conway Gordon be elected an honorary member of this Chamber. He has already received a similar distinction from the Calcutta Chamber of Commerce, and I feel sure he will be gratified that the mercantile public of this the largest wheat exporting city in Asia recognize the ability he has shown and the trouble he has taken in urging on Government the construction of railways and the reduction in rates of carriage for wheat. Now, you are no doubt aware that Major Gordon is the author of the yellow pamphlet which has been circulated far and wide by both Chambers, and which has met with their entire approval. Every member has been supplied with copies, and I am sure you will acknowledge the ability with which the subject has been grasped, the earnestness with which it is written, and which cannot fail to impress every reader with the importance of the subject. That is, perhaps, its greatest merit. It has by this very vigour and earnestness called an unexpected amount of attention to the possibility of development of the wheat trade of India by increased railway communications and reduced rates of carriage. It is not given to everyone to possess the hammer with which to strike the anvil while the iron is hot. For some time past, there has been a growing conviction that India has been starved in her railway systems. It appeared pardonable while Government were suffering from the effects of the famines in 1876 and 1877, when they were told it was a sin to spend more than 2½ millions on public works in one year. But happier years have restored confidence in the resources of India. The extraordinary results of railways as seen in America, the great increase in the steam-ship carrying power of the world, have brought about a strong public

feeling that the time has come for a sudden reversal of the former niggardly policy—that we shall best benefit India by urging the Government to reduce railway rates to a minimum and to impress upon them the necessity of taking steps to attract European capital. I would have a member of the Indian Council at home, told off to watch the London money market to be continually in communication with capitalists—in fact, really to act as a promoter of railways on behalf of the Government of India. Now, the extreme merit and use of this pamphlet was its extremely practical character. Full of carefully compiled facts and practical suggestions, admirably digested, it came with full force on minds ready to receive the lessons it wished to teach. I have very little doubt but that we owe the reduction in the rates between Delhi and Bombay to this pamphlet, though of course we are not less under obligation to Mr. Hope, who, I believe, finally determined them. What this reduction has brought about, you will see in the Chamber's Report, and the Chairman has just told you that in the past five months the quantity is 500'70 more than was carried at the same period last year. Again, I strongly suspect that Major Baring's interesting examination of the wheat trade in his budget last April was very much assisted, if not instigated by Major Gordon's labours. In his budget Major Baring says he had dwelt at some length on this subject, not only on account of its intrinsic importance, but to draw the attention of those who have a practical acquaintance with trade and Indian agriculture, to the necessity of exertion, with a view to strengthen by all possible means the position of Indian wheat in the European markets. Now, gentlemen, we have seen during the past year some very considerable reduction in the rates of railway carriage, but as your Committee lately told the Agent of the G. I. P. Railway, we should never be content until their rates were as low as those on the Scinde and Punjab. That railway is the only one which, as Major Gordon says, at all approximates in its rates to the charges made on American railways. It will, however, be a poor compliment to this distinguished man of figures if we only give him an honorary title, and did not honour him by the flattery of imitation. We cannot all write pamphlets and accumulate facts of years, but we can urge the Government by our memorials, and I do trust the next Committee will not allow the question of increased railway communications to drop, but will early in January call a public Meeting,

to press upon Government the necessity, the advisability, of spending more money on Indian railways. I hope we shall agitate and agitate, for at least ten millions in the coming year, ten millions the next one, and until we have spent the sum of £50,000,000 at least. As Major Gordon says, railway enterprise in India has got beyond the experimental stage. It is now a tried fact, and to hesitate further will be nothing but economical blundering. The Committee have appealed to the Manchester, London, and Liverpool Chambers of Commerce to assist them politically. Already the Glasgow Chamber has sent a deputation, and you will see that the Glasgow Chamber has always taken a leading interest in the development of India. I am fortunate in having Mr. Wood as a seconder to my proposition. As a railway man he may not approve of all Major Gordon's criticisms, but his acting as seconder is a proof that he appreciates fully the good work which the Major has done, the time he has done it in, and the way he has executed his self-imposed task. I have also been informed that Mr. Birkmyre contributed much to this pamphlet. We certainly owe him our grateful thanks. But this pamphlet deserves attention for the remarks on the cultivation of wheat—a subject which has much exercised, and I hope profitably, the present Committee. We have written several letters on the subject, all of which have received attention from Government. It is most satisfactory to find the revenue officers are following the wishes of Government and are taking the highest interest on the subject. As you saw in the papers, Mr. Sheppard, of the Northern Division, had been circulating instructions and recommendations to his Collectors. Mr. Crawford had vigorously attacked the Government for prizes. Colonel West from Kattyawar, Major Nutt from Gondal, the Commissioner of the Central Provinces, have all written in to the Committee asking for our opinion of various samples, and requesting us to send them clean seed, such as we recommended them to sow, and also samples of those qualities which we objected to, such as hard and soft mixed wheat, and red and white descriptions. Everywhere there is an earnest desire to promote the improved culture of wheat. Major Gordon in his pamphlet gives the following suggestions:—“(a) To impress on the head man of every village in the wheat-growing districts of India, the necessity of using unmixed seed, and the advantages of growing the best description of wheat the climate and soil of the district will permit. (b) To furnish all cultivators with seed of the very best quality by making arrangements at the principal centres for the exchange of average parcels of

wheat for equal weights of selected seed, an expert being engaged especially for the purpose of selecting, collecting, and distributing the best seed-grain procurable. (c) To have always on view in the principal markets samples of the different classes of wheat recognized by the English trade, to enable natives to better classify their stock, and to judge of its fair market value. (d) To send daily to all the principal wheat centres in India telegraphic advices of the prices ruling for the different descriptions of wheat, both in London and at their nearest seaport. (e) To hold small district agricultural Exhibitions as often as possible, at which prizes would be given for the best food-grains and other agricultural produce exhibited." You may wonder, gentlemen, why I have repeated to you so many observations, the truth of which is so patent to you all. It is only because this is one of our few opportunities for giving expression to the feeling and sentiments possessed by business men on these important questions. Newspapers have, no doubt, a wonderful power, but at these meetings we do great service in expressing public opinion in forming it, in sustaining it, and it is the effect of a gradually increasing bulk of opinion that leads to progress and advancement. If we are successful in our efforts, when the history of the people in 1884 is written, next year will be marked as the starting-point of a new era in the material prosperity of India and England. It is because Major Gordon has taken an initiative part in this good work that he deserves the honour we offer him.

Mr. Wood said—I have great pleasure in seconding Mr. Forrest's motion. We all know Major Gordon has taken very great interest in the development and prosperity of the country ; in which, in fact, we all take an interest, and I hope that his election as an honorary member will be unanimous.

The proposition was carried unanimously.

The Chairman proposed " that the appointment by the Committee of Mr. N. S. Symons as Auditor be confirmed."

Mr. F. Forbes Adam seconded the proposition, and it was carried unanimously.

The Meeting then separated.

154 GENERAL MEETINGS OF THE CHAMBER OF COMMERCE.

A ^HGENERAL MEETING of the Chamber of Commerce was held on Friday the 4th January, 1884, to confirm the nomination of the members of the new Committee made in accordance with Section 12 of Rule VII.

Present :

Mr. JAMES THORBURN, *Chairman, in the Chair.*

Mr. J. Wilson.

„ J. Greaves.

„ N. S. Glazebrook.

„ W. Richardson.

„ J. Steiner.

„ J. H. Slight.

Mr. F. Forbes Adam.

„ L. R. W. Forrest.

„ O. Gott.

„ M. Mowat.

„ M. R. Wyer.

„ T. W. Wood, and

Mr. J. GORDON, *Secretary.*

The following resolution was proposed by the Chairman, seconded by Mr. Mowat, and carried unanimously :—

That the following gentlemen be elected members of the Committee for the year 1884 :—

G. A. Barnett, Esq., J. H. Slight, Esq., A. Pallis, Esq., J. L. Symons, Esq., and A. F. Beaufort, Esq.

A vote of thanks to the Chairman terminated the proceedings.

ANNUAL REPORT.

YOUR Committee have the honour to report to the members of the Chamber on the principal topics which have engaged their attention during the official year just closed.

GRAIN RATES FROM AGRA AND DELHI TO BOMBAY BY THE B. B. & C. I., AND THE RAJPUTANA-MALWA STATE RAILWAY.

Our predecessors in office were engaged during the whole of last year in a continuous correspondence upon the subject of the injustice done to this Port by the high rates charged on these lines as compared with those of the East Indian Railway. The last communication of importance made by the Chamber was dated the 1st of July 1882, and that remonstrance was, on the 22nd idem, forwarded by the Government of Bombay to the Government of India with a letter strongly supporting the position taken up by the Chamber. When your Committee took office no reply to that communication had been received, and in the meantime high, nearly prohibitive, rates were still charged, and consequently no wheat was being received from the districts of North-Western India.

Your Committee, therefore, on the 19th of February, again reminded His Excellency the Governor in Council that no reply, although anxiously awaited for months past by the mercantile community, had yet been given by the Government of India to His Excellency's representations. They at the same time suggested that as an early settlement of the question was, in the interest of the trade, most desir-

able, they would consider a differential rate between Delhi and the two ports of one anna per maund in favour of Calcutta admissible, it being understood that, at whatever rate per maund the carriage of grain from Delhi to Calcutta might be fixed, the rate from Delhi to Bombay, via Rajputana, should be fixed at one anna per maund higher. This differential rate would more than cover the difference in the cost of fuel on the two lines, and would remove the specific objection taken by the Government of India to the principle of the equalization of rates. Your Committee at the same time took the opportunity to suggest that many advantages would accrue to the public if the management of the Rajputana State Railway were made over to the B. B. & C. I. Railway Company, but His Excellency in Council believed the management of the Rajputana Railway to be both economical and efficient, and, if the through rates were regulated in accordance with the principles laid down by Government, he saw no reason why the present arrangement should fail to give satisfaction to the public.

The discussion was at last brought to a satisfactory conclusion by the Government of India who, in their letter dated 2nd March to the Government of Bombay, after explaining fully the principles on which, in their opinion, railway rates and fares should be regulated, decided to reduce the through rates between Delhi and Bombay to 11 annas for wheat and 11½ annas for other grains and seeds of the same class, other stations being treated proportionally. His Excellency the Governor-General added that the opportunity might be taken to abolish the restriction of the minimum load to which the through rates would apply. The Agent of the B. B. & C. I. Railway Company having concurred in these reductions, they came into force on the 1st of May last.

The reduction has already resulted in a large increase of

traffic as will be seen from the following comparative statement showing the quantity of wheat received at Bombay by the Rajputana-Malwa Railway *via* Sabarmutti (through traffic) in the months of May, June, July, August, September and October, in the last three years :—

	Cwts. 1883.	Cwts. 1882.	Cwts. 1881.
May	196,768	35,864	54,762
•June	396,014	97,113	33,265
July	*86,105	60,871	9,606
August	363,991	44,369	8,033
September	170,291	3,058	151,891†
October.....	180,225	10,951	250,424†

—(*Appendix B.*)

GRAIN RATES OF THE G. I. P. RAILWAY COMPANY.

This important subject has more or less occupied the attention of your Committee during the whole of the year. The rates were, it will be remembered, raised on 1st May 1881; but, owing to special circumstances, they had no immediate effect in arresting or stopping the trade. During 1882, however, the position of the trade had very much altered, and the adverse effect of the enhanced rates had become very apparent. The Committee, therefore, addressed two letters, dated respectively the 9th June and 12th July, to the Agent of the Railway Company on the subject.

These letters having elicited no reply, your Committee, on the 19th April last, again wrote to the Agent. They pointed out that, since July 1882, the falling off in the arrivals of wheat at Bombay by the G. I. P. Railway had continued; that the depression, or low level of prices, which had, throughout that period, existed more or less in the

* Traffic was entirely suspended during nearly the whole of this month, in consequence of the break on the B. B. & C. I. line.

† Shipments before the increase of rates on 1st November, 1882.

home markets in consequence of the good harvests last year in Europe and America, had resulted in a great curtailment of business, and that the Indian cultivators had again largely resorted to storing their grain, complaining that the prices offered were so low that they could not afford to pay the high charges for carriage to the port of Bombay. Recent experience seemed to have established the fact that the Company's grain rates were absolutely in themselves greater than these articles of export could bear in ordinary times, and that it was only when an occasional, exceptional, demand sprang up, in consequence of scarcity or bad harvests in Europe and America, that supplies were brought in quantity to the port for shipment. The extended cultivation of wheat in the Central Provinces principally owed its origin to the demand which arose on account of the famine in Southern India, and it seemed to your Committee not improbable that if the present G. I. P. rates were maintained, they could only lead to a serious contraction of the acreage under wheat cultivation, in the provinces served by the Company. The effect of the low through rates to Kurrachee, *via* Lahore, by the Indus Valley, Punjab Northern, and Sind, Punjab and Delhi Railways, had already become apparent in the extraordinary increase in the exports of wheat from that Port. From 22,357 cwts., the export in the year ending 31st March 1879, they had risen to 2,739,633 cwts. in 1883.

The Agent of the Railway Company in a communication to the Chamber, dated 2nd August 1882, remarked that a reference to the Government analytical returns of railway working for the year 1881, would show that, at the rates then existing, the grain traffic did not pay its share of the guarantee. But your Committee observed that if, in fixing their rates, the Railway Company had adopted the principle that each particular rate should contribute a certain

amount of profit, without reference to the nature and circumstances of the traffic, such as the rate being only indirectly remunerative by filling rolling-stock which would otherwise run empty, or being likely to create new traffic by encouraging industry and cultivation, then that the principle was in itself erroneous, that it was contrary to the practice of railway management in Great Britain and America, and that it was entirely opposed to the policy which the Government had in view in sanctioning the construction of the G. I. P. and other Indian lines, that they should serve to multiply produce and increase the national wealth. The principles according to which railway rates and fares should be regulated were fully explained in the letter addressed by the Government of India to the Government of Bombay, dated 2nd March 1883. The enunciation of these principles had been received with great satisfaction by the Chamber, and, if they were put in practice, they would, there could be little doubt, have a very beneficial effect on the country, and on the commerce of India, while the Railway Company itself would, by the increase of traffic induced by the lower rates, benefit in the long run financially.

The Government of India had, from 1st May 1883, reduced the rate from Delhi to Bombay to 11 annas a maund; which would enable wheat to be delivered in London at a reduction of 1s. 6d. per quarter; and the Committee hoped that the Board of Directors would be induced to adopt a similar liberal policy, for they believed that it was only by a reduction of the G. I. P. grain rates to a point which would tend to stimulate cultivation and trade in ordinary times, that the export of Indian wheat, in the face of the many disadvantages which it laboured under in the English and Continental markets, was likely to be maintained.

It was not until the 4th of June 1883, that the Chamber received from the Railway Company a copy of a letter,

dated 20th April, which had been addressed by the Board of Directors to the Under-Secretary of State for India, with reference to a communication received by the Secretary of State from the Liverpool Chamber of Commerce, on the subject of the rates charged on Indian Railways for the conveyance of wheat and seeds. The Agent, in forwarding this letter, observed that this expression of the Board's views answered in effect the letter from the Committee of the Chamber of the 19th April last, and previous communications; and he took the opportunity of informing the Chamber that wheat and other grain had, during the previous few weeks, been offered at the stations for transport to Bombay in quantities beyond the engine-power at his command to move without some detention.

On receiving this communication, your Committee appointed a Special Sub-committee of members interested in the wheat trade to consider the letter addressed by the Board to the Under-Secretary of State, and the Agent's intimation as to the deficiency of the Company's rolling-stock, and to prepare a reply thereto. The Special Sub-committee consisted of the Chairman, the Deputy Chairman, and Messrs. Mowat, W. Lang, J. Fachiri, J. Steiner, and L. R. W. Forrest; and the reply which they had prepared was approved and sent to the Railway Company on the 17th October. In it, your Committee observed that the general import of the letter addressed by the Board of Directors to the Under-Secretary of State was apparently intended to show that India was incapable of supplying any considerable proportion of the wants of Europe: that the condition of Indian wheat was inferior; and that reduced rates of carriage would neither increase the export, nor overcome the irregularity of supply: that a number of propositions were advanced in support of this contention, nearly every one of which would furnish a

strong argument for the contrary view, while the estimates of the cost of production of wheat, and of the cost of transporting it from the railway stations on the G. I. P. line to London, on which the Directors principally justified their refusal to reduce their rates, were so erroneous and misleading that the Committee could only express their regret that, with the facilities which the Railway Company possessed, both in India and London, for procuring accurate information, they had not obtained it, before publishing their letter : and that no allusion whatever was made in the letter to the utter insufficiency of the rolling-stock with which the line was furnished, and to the line being frequently blocked with grain which they were unable to carry, the Company being thus enabled to continue earning unduly large profits at the expense of the trade, which had for years been struggling for existence, and which, as Indian wheat was becoming better known and appreciated, would, with proper and reasonable facilities, assume far greater proportions than at present. After discussing each of the paragraphs of the letter in detail, the Committee concluded by urging that the doubling of the line from Bhosawul to Nagpore, and wherever else necessary, should be immediately proceeded with, and that what additional rolling-stock might be necessary to cope not only with the present but with the greatly increased wheat traffic which might reasonably be expected hereafter, should be ordered and supplied as soon as practicable, and that these works be at once carried out in order that the trade might derive the earliest and fullest possible benefit from the important and most desirable schemes of extension which had been brought forward. And that while the line was thus being put into a state of thorough efficiency, the Company would now and hereafter abandon their present illiberal policy, by granting such facilities as they could to the wheat trade, by abolishing every restric-

tion on small consignments, and reducing their rates to a point which would enable the trade to compete with other countries, and so ensure a larger and more regular export in future.

No reply has yet been received to this communication, but certain reductions in their grain rates, to take effect from 1st November, 1883, have been announced by the Railway Company. The Committee have intimated to the Company that they cannot look with satisfaction on any rates for the carriage of wheat which are higher than those on the S. P. and D. Railway, and that, in the meantime, as, in the recent reductions, the rates from some of the best wheat-producing districts were either left untouched, or fixed at rates higher than those in force previously to 1st May 1881, they hoped that the Company would, at an early date, be able to extend the reductions to these stations also.—(*Appendix C.*)

THE INDIAN WHEAT TRADE.

An able and interesting pamphlet, entitled “The Influence on English Trade and American Protection of the Development of India,” which had been published at Calcutta, was forwarded to the Chamber, and received the best attention of your Committee. The questions principally dealt with in this pamphlet were the development of the wheat trade of India by means of cheaply constructed Railways, and by the reduction of railway rates to a point that might enable India to compete with America for the wheat supply of Europe on equal terms. Your Committee were of opinion that if such a policy were adopted by the Government of India, there could be no question that it would result in incalculable benefit to the country. The arguments advanced were chiefly applicable to the wheat trade,

but there was not an industry, agricultural or manufacturing, in the general trade of the country which would not also benefit from the great and rapid expansion that would follow. The total production of wheat in India was, as estimated by good authority, not less than 40 million quarters, the average annual import from all countries into the United Kingdom being only about 11 million quarters; and the total consumption of wheat in India was not large, the bulk of the inhabitants subsisting on cheaper staples. Yet a comparatively small proportion of this large production was, in ordinary times, exported, owing to the difficulty and expense involved in transporting it from the interior to the seaboard. The rates for the carriage of grain, which affected the small native trader, were on the E. I. and the G. I. P. Railways about three times higher than the rates for the carriage of grain in America; and taking these high rates, together with the ruinous cost of cartage for long distances from the wheat fields to the railway stations in the interior, it was not surprising, as the writer justly observed, that India at present succeeded in carrying off only a portion of the English wheat trade at times when prices were ruling the highest, instead of occupying the position she ought of being able to dictate her own prices to America.

A point of great importance referred to in the pamphlet was that Government should consistently reserve to itself the right of fixing absolutely the rates on all lines for the carriage of cheap staples. Government had, it was true, in its contracts with the Guaranteed Companies, reserved the right of fixing the maxima of all rates and fares, and the Government of India, in 1868, declared that such maxima should thenceforth be fixed by Local Governments, that the actual charges within such maxima should be regulated by the Railway Companies, and that

the maxima should leave a reasonable margin for the exercise of a discretion by the Companies in varying the working rates, as circumstances might, in their opinion, require. The Bombay Government fixed as the maximum rate for food-grain 12 pies per ton per mile, which was nearly double the present rates charged by the G. I. P. Railway Company. It will be remembered that the Chamber, in September 1881, having in view the arbitrary action of the G. I. P. Railway Company in raising their grain rates in May previously, protested against this maximum rate as being unnecessarily and excessively high, and represented that it should be reduced; but the Government of India declined to interfere with the discretionary power vested in the Board of Directors, with the approval of the Government of India and the Secretary of State.

In circulating this pamphlet to leading men in England and in India, interesting themselves in Indian affairs, your Committee stated that they considered that too much importance could not be attached to the existing necessity of largely and speedily extending the system of railway communications throughout the country. It was only by the adoption of such a policy and the application of low carrying rates for goods, particularly grain, that the full development of the natural resources of India, and of her export trade, could be secured, and that she could hope to compete successfully with other countries. The wheat trade of India needed every encouragement while nothing could be more discouraging than the tardy and timid policy of the Government in regard to the construction of railways. In respect to cheap communication between the interior districts and the Coast, it was said that, at the present rate of progress, India was already about a century behind America, and that every day it was getting still further behind. The result of railway con-

struction in India during the last thirty years was that over ten thousand miles of railway were open, while in America about 105,000 miles were open in 1881, and during 1882 not less than 18,000 miles of new lines were projected at an outlay of £90,000,000.

Your Committee in their circular touched upon only a few of the more important facts referred to in the pamphlet as accounting for the comparatively backward state of India. With these, and with the remedies suggested, they generally agreed. But the pamphlet abounded with carefully compiled facts and practical suggestions admirably digested, and your Committee commended it to the attentive consideration of all who were interested in the Indian trade, and in the progress of India.

The pamphlet, and communications received from the Governments of Bengal and the North-West Provinces, and from the various Chambers, on the subject, will be found in the appendix.—(*Appendix D.*)

CULTIVATION AND ADMIXTURE OF WHEAT WITH DIRT AND INFERIOR GRAINS.

In various papers issued by Government on this subject, reference was made to the well known fact that the relatively low price of Indian wheat in the English market was not so much due to its quality, which was generally very good, but to its admixture with dirt and inferior grains, and that this admixture of inferior grains with the wheat was due to the fact that, cultivators often grew other grains in the same field as the wheat as a resource in the event of the failure of the wheat crop. Your Committee, therefore, represented to Government that as the trade in Indian wheat was rising to great importance, and as it was most desirable that this practice should be discontinued, and the position

of Indian wheat improved in the markets of Europe, Government should order their local officers in all districts where wheat was grown to take whatever steps might be possible to prevent this admixture being resorted to. Copies of this letter were forwarded by Government to the Commissioner in Sind and the Commissioners of Divisions, with a request that they would communicate the remarks of the Chamber to the Collectors of wheat-producing districts in their respective divisions; and Government desired the Collectors to urge on wheat growers the importance, in their own interest, of preventing admixture with the wheat of dirt, other grain, or other foreign substance, which led to their obtaining for the wheat produced by them a lower price than they might otherwise secure. Your Committee, whilst thanking His Excellency the Governor in Council for his courteous compliance with their request, as it appeared in Government Resolution No. 4734, dated 23rd June last, suggested that a copy of the Resolution should also be sent to the Chief Commissioner of the Central Provinces, where wheat was produced in large quantities: they also suggested whether it would not have a good effect in improving the cultivation of wheat and preventing the admixture of inferior grains, if Government offered through its local officers in the different wheat growing districts small prizes for the best farmed fields in which no other grains were grown. A further Resolution was passed by Government on the 2nd August, in which His Excellency saw no objection to the course proposed by the Chamber, and at the same time he forwarded a letter received from the Commissioner, S. D., No. 1397, dated 6th July 1883, in which the Chamber would perceive that the Bombay wheats were favourably pronounced upon both as regards their quality and freedom from other grains. Your Committee, having carefully considered the Commissioner's

letter, regretted that they could not concur in the views expressed by him on this subject, and that the advices received from the European markets stated that the complaint this year had been that the Bombay wheats had more dirt in them than usual. After entering somewhat at length into the system of cultivation and the practices of admixture, your Committee stated that, with the view of improving the cultivation of wheat and preventing admixture, they had already suggested that prizes should be given for the best-farmed fields, but they begged now further to suggest that stringent orders should be given to all subordinate European or Native Revenue officers by the various Collectors to make known in every village, either by placard, advertisement or *bataki*, or by personal influence, the advantage to cultivators of reaping pure and unmixed grain, and the advantage of separating at seed time the soft from the hard grains, the white from the red, and of sowing them in separate fields. Your Committee were strongly of opinion that if the seed grain were carefully selected, and all hard wheat taken out of seed grain intended to be sown for soft wheat, and of all soft grain taken out from what was intended to be hard, the crops would be much less liable to come up mixed. It was a question whether any Government expenditure could be better laid out than in supplying cultivators gratis, for a year or two, with pure soft white, soft red, and hard wheat for sowing : a large amount of pure qualities of each description could be supplied for Rs. 10,000 every year, and the Chamber of Commerce could supply the Bombay Government, in a reasonable time, with quantities of absolutely pure wheat of each description, for distribution to the ryots, if Government would bear the necessary expense of hiring godowns for the purpose, of hiring women for the purpose of picking out all grains of a different descrip-

tion, and of buying the purest lots of wheat, in the first instance, for the operation. Your Committee, therefore, suggested that Government should give Rs. 10,000 for this object in the first year, which the Chamber might supplement from its funds to the extent of, say, Rs. 1,000. In the opinion of your Committee nothing at first but a liberal expenditure of Government money and exercise of influence on the cultivators would work any real improvement, and there was every probability that if the seed grain was not improved within the next year or two, the admixture of hard grain with soft, and red grain with white, and *vice versa*, would go on increasing, and the seed sown would every year be getting more mixed and more difficult to improve.

The Chamber will have learned with great satisfaction that Government, in their Resolution No. 8742 of the 29th November last, fully recognised the propriety of measures being taken for improving the quality of the wheat grown in this Presidency, and was prepared to spend moderate sums from the public revenues for this object. It was the opinion of Government that the subject should be actively taken up by the Director of Agriculture, who should distribute useful information among the producers and intermediate agents who dealt with the wheat crop, and place before them samples of the wheat which were most in demand for export, and should also supply seed of pure quality gratis or at a low rate to selected cultivators in the wheat-growing districts with suitable precautions that it should be used to the best advantage. Small prizes might also be awarded for the most approved cultivation. A sum not exceeding Rs. 10,000 might be appropriated yearly in this way until further notice, and the action taken in the matter should be carefully reported by the Director from time to time. The Director should maintain communication with the Chamber of Commerce on this important subject, and any sum which the Cham-

ber might appropriate to the same objects might probably be best expended under the Director's supervision.—
(*Appendix E.*)

QUALITY OF INDIAN WHEAT.

. A very valuable report on the quality of Indian wheat, which was prepared at the request of the Secretary of State for India by Messrs. MacDougall Brothers, the well-known steam millers of 10, Mark Lane, London, was forwarded by Government to the Chamber. His Excellency the Governor in Council at the same time desired that the Collectors and Political Officers in charge of wheat-producing districts would take steps to make the contents of the report, when it appeared in the newspapers, known as widely as possible within the limits of their respective charges. Your Committee, in thanking His Excellency for this communication, suggested that a paragraph might be added to the report stating where the wheats described were grown, and from what ports they were shipped; that the report should be translated into the French, German, and Italian languages, and extensively circulated in the large markets on the Continent of Europe, as well as in England, it being more important to make known to buyers and consumers the excellent qualities of Indian wheats than to the cultivators who would certainly grow the wheat if a market were found; and they hoped that His Excellency would kindly recommend the Government of India to give effect to this suggestion at an early date.—
(*Appendix F.*)

WHEAT CULTIVATION IN THE PUNJAB.

Copies of the proceedings of the Punjab Government, dated October 1883, have been forwarded for the informa-

tion of the Chamber. From these it will be seen that careful enquiries were being made into all points relating to the cultivation of wheat on which it was desirable to obtain information, and also as to the steps which could be taken towards encouraging the growth of better classes of wheat and improving the practices of the trade.—
(*Appendix G.*)

REDUCED RAILWAY RATES AND SUEZ CANAL DUES FOR WHEAT.

In June last your Committee received a letter from the Bengal Chamber of Commerce, in which they pointed out the effect which a more rapid extension of cheap railway communication, and a reduction of railway rate from the interior to the seaboard would have upon the Indian wheat trade. They further observed that apart from the results of railway development there were other means by which the Indian wheat trade could be assisted; and the writer of the pamphlet, entitled “Indian Wheat or the Influence on English Trade and American Protection of the Development of India,” had suggested that the trade in wheat in each province should be narrowly looked into, with the view of having every charge in transit, tolls, canal fees, port dues, &c., either abolished or reduced to a minimum. The Bengal Chamber, therefore, enquired whether an endeavour should not be made by the united action of the Chambers in India interested in the matter to bring under the notice of the Suez Canal Directory the expediency of assisting the wheat trade of this country. By a liberal reduction in the Canal dues on the proportion of tonnage of each homeward bound ship represented by her wheat cargo, the wheat trade would be encouraged and increased to an extent which, it was thought, would more than recoup the Canal Company for such reduction. The

better India was enabled to compete with America in supplying Europe with wheat, the better it would be for the Canal Company, for American wheat did not help its income, and it was to the Company's interest to encourage the expansion of the Indian wheat trade as far as it legitimately could.

Your Committee were about to inform the Bengal Chamber that the proposal which they had made had their approval, though they would have preferred that the representation were made in behalf of trade generally and the great importance at the same time set forth of a liberal reduction being made in the Canal dues on homeward bound cargoes of wheat, on account of the many disadvantages under which this country laboured in her competition with America in that article. Before this letter, however, had been despatched, the public telegrams received on the 12th July last announced that an agreement had been made between Her Majesty's Government and M. DeLesseps providing for the construction of another Canal and for the reduction of the present tariff on 1st January next year, with other concessions. It was not stated what this reduction amounted to, but your Committee presumed that the Bengal Chamber would probably now deem it advisable to hold the proposed representation in abeyance until further information in respect to the new tariff was received. The Bengal Chamber considered that under existing circumstances it might be premature to urge the matter on the Suez Canal Directory, and they would, therefore, wait for a more favourable opportunity for taking up the question.—(*Appendix H.*)

PETROLEUM LEGISLATION IN INDIA.

When the Petroleum Bill came before the Legislative Council of His Excellency the Governor-General, the

Chamber, in August 1880, after a full discussion of the whole question, unanimously resolved that legislation was unnecessary and would seriously restrict the important and rapidly growing trade in petroleum. Since the passing of the Act, difficulty and uncertainty had arisen from the belief that reliance could not be placed on Abel's system of testing in India; inconvenience and loss had been caused to importers in Bombay and Calcutta by the inadequacy of the organisation provided to carry out the provisions of the law; while importations were subject to the excessive risks of rejection or confiscation if they did not come up to the legal standard. Representations were, therefore, made to the Chamber by leading firms largely interested in the commerce of petroleum that this important trade would be relieved of the risk and uncertainties surrounding it, and would be greatly facilitated, if the following suggestions, which had been submitted to His Excellency the Viceroy, were adopted by Government, viz. :—

- (a) The finality of New York inspection under conditions satisfactory to the Government of India.
- (b) No alteration in the present standard unless (or until) scientific investigation proved *conclusively* a change in the character of the oil in transit equivalent to —degrees, when notice of one year should be given as to any amendment deemed necessary to accord therewith.

Your Committee, after carefully considering these suggestions, were of opinion that the first one, (a), would meet the requirements of exporters as well as of importers of oil, and that certificates of quality given at the port of shipment might, under conditions satisfactory to Government, be accepted as final. With regard to the suggestion, (b), they believed that any advance in the present standard

of 73° of Abel's test was not only unnecessary for the public safety, but would impose a serious restriction on the trade. If, however, any change in the standard were decided on, they submitted that it should not be altered without sufficient notice being given to protect those engaged in the trade, which was necessarily conducted on the footing of buying and selling for future delivery. These suggestions were submitted to His Excellency the Governor in Council, and, as they seemed to be well calculated to facilitate the trade in petroleum, your Committee expressed their hope that His Excellency might be pleased to recommend them to the favourable consideration of the Government of India.

It will be remembered that a Sub-committee was last year appointed to consider the draft rules for the landing and storing of petroleum under Act VIII. of 1881, which had been published by the Government of Bombay in January 1882, and that, in accordance with their report, the Committee suggested to Government some important alterations and modifications. These rules were never introduced. On the 3rd July last, however, a copy of revised draft rules under the Petroleum Act was forwarded by the Commissioner of Customs to the Chamber with a request that any observations or suggestions which the Chamber might wish to make with respect thereto might be submitted by them direct to Government. A Sub-committee, which all the members who had served on last year's Sub-committee who were in Bombay, were invited to join, was again appointed to consider the revised draft rules, and their report, having been approved, was submitted to Government. The report was sent in on 17th August last, but the revised rules have not yet been introduced.—(*Appendix I.*)

RAILWAY RATES FOR THE CARRIAGE OF PETROLEUM.

Representations were made to the Chamber as to the high rates charged by the G. I. P. and the B. B. and C. I. Railway Companies for the carriage of kerosine oil. These rates were much higher than those charged by the East Indian Railway Company; and they appeared to your Committee to be so high that the trade of this Port in petroleum was hampered by the great difference between railway rates at Bombay and Calcutta. The Committee, moreover, were informed that the Bengal Chamber were bringing the subject before the East Indian Railway Company with the view of obtaining a further reduction in their rates.

Your Committee, therefore, submitted a recommendation to the two Companies that the rates should be reduced. The B. B. and C. I. Railway Company shortly afterwards intimated that as soon as the necessary formal notices could be given, kerosine oil, flashing at or above 73° , Abel's test, would be forwarded from Bombay to other stations on that Railway, and to stations on the Rajputana-Malwa Railway *via* Saburmutti, at the following reduced class rates on both lines, viz. :—

- (a) When carried at owner's risk, 1st class instead of 2nd class as now.
- (b) When carried at railway risk, 2nd class instead of 3rd class as now.

The G. I. P. Railway Company, after some correspondence, agreed to similar reductions, to take effect from the 1st of November.—(*Appendix J.*)

INCREASED DOCK ACCOMMODATION.

On the 20th July last, a letter was received from the Port Trustees, forwarding their Resolution, No. 304 of

12th idem, which contained a description of the new Dock which the Trustees thought should be built, together with plans of the proposed Dock and plans showing in addition the extension of channels that would be required, and requesting that the Trustees might be furnished with the opinion of the Chamber on the proposed extension. To the information contained in the plan and Resolution of the Trustees, it appeared only necessary to add that the three berths at the end of the jetties shown on the plan to be 223' long, might, in the opinion of the Trustees, be used by much longer vessels, inasmuch as the stem and stern of a vessel might extend beyond either corner of the jetty, say, 40 feet, being the width of the vessel occupying the berth at either side of the jetty.

Your Committee, on receiving this communication, convened a Special General Meeting of the Chamber, on the 10th of August last, to consider the question, when the following Resolution was passed :—

“That the Chamber approves of the Dock extension scheme recommended by the Port Trustees for adoption by the Dock Extension Committee, and approved of by them at a meeting held on 12th July. The Chamber observes from the plans that it is expected the whole scheme will take five years to complete ; and as increased accommodation is very urgently required, it trusts that the work will be begun as soon as possible, and that the Dock will be finished without any avoidable delay.”

In forwarding this Resolution to the Trustees, your Committee desired that the Trustees would do all in their power to have the Carnac Bunder nuisance removed to some other locality where it could do little or no injury ; further that the Trustees would specially urge upon Government the desirability of sanctioning the scheme as soon as possible,

in order that the work might be proceeded with at the earliest practicable date. The proposal of the Trustees to extend the Wet Dock on the Elphinstone Estate, by an additional Dock taking up the Musjid and Nicol Basins, appeared to Government to be very suitable, and in their Resolution of the 15th September last they approved of the scheme in view to detailed plans and estimates being prepared and submitted. Government also approved of the new Dock being two feet lower than the Prince's Dock, but considered that the deepening of the approach should be carried out at the same time ; and as the native Coasting Trade would be diverted to the other bunders and basins in the Harbour, the Trustees were asked to report whether they intended to adopt measures for improving the accommodation in this respect.

The manner in which the Trustees proceeded to provide for the trade which would be displaced by the Dock extension works, was described in their Resolution No. 380, dated 30th August last, and in their letter to the Chamber of the 3rd October, both of which will be found in the appendix.—(*Appendix K.*)

DRY DOCK ACCOMMODATION IN THE PORT.

In September last, your Committee were favoured with copies of the report of the Committee appointed by Government to consider the question of Dry Dock accommodation for the larger classes of Her Majesty's ships of war, and of the Government Resolution thereon, No. 263, dated 20th June last. His Excellency the Governor in Council regretted that the Committee had not arrived at an unanimous report on the question whether the Hydraulic Lift at Hog Island should be put into thorough repair or be

abandoned altogether. Having regard to the fact that additional Dry Dock accommodation was at all times required, that the construction of a new masonry Dock would occupy a considerable time, that the trade would probably assume still larger proportions, and that the Steamer Companies were anxious for accommodation for painting and other repairs,—finally that as this Lift, upon which Government had expended a very large sum (1) is at present almost useless; (2) would only be rendered useful by any private firm if transferred at a sacrifice of nearly the whole of its present capital cost; and (3), if repaired, would at all times constitute a valuable addition to the Dock accommodation of the Port with special advantages in time of war,—it would, in the opinion of His Excellency in Council, be worth while to execute the repairs estimated to cost Rs. 43,500 in the report of Mr. Deadman, constructor of the Dockyard, and better still to undertake the further outlay recommended in the same report (or Rs. 1,20,000 in all) to render the Lift really efficient, with the estimated annual charges for maintenance (Rs. 15,000). Your Committee suggested that the work of putting the Hydraulic Lift at Hog Island into thorough repair, which His Excellency in Council had approved of, should be proceeded with as soon as practicable.—(*Appendix L.*)

WADWAN STATION COTTON MARKET.

A communication was received from the Assistant Political Agent, Jhalawad Prant, Wadwan, stating that he had reason to believe that the Chamber had received erroneous information lately regarding the existence of “Transit duties” at Wadwan Civil Station on cotton exported to Bombay and elsewhere; and that if the Chamber at any

time required information regarding this or other matters, he would be happy to supply it. In reply, your Committee forwarded, for his information, a copy of the correspondence that had passed in 1880, between the Chamber and the then Assistant Political Agent at Wadwan regarding the Cotton market there ; and requested him to favour the Chamber with any remarks which he might wish to make on the points raised in that correspondence. The Assistant Political Agent was thereupon good enough to forward to the Chamber a detailed letter explanatory of the position and circumstances of the Wadwan Civil Station cotton market, which will be found in the appendix.—(*Appendix M.*)

IMPROVEMENT AND CULTIVATION OF COTTON IN THE DHARWAR COLLECTORATE.

A communication was received in June last from the Commissioner, S. D., in which he asked if the Chamber would place the sum of Rs. 1,000 at the disposal of the Collector of Dharwar for 'the prizes which he proposed giving for the best and most carefully weeded and cultivated 5 acre lots of ground sown with the selected seed, provided it be unmixed. Your Committee replied that the giving of prizes for encouraging the production of cotton in India, and the improvement of its quality, appeared to them to be more immediately the function of Government ; and in former years this was done by Government to a considerable extent, as he would see from the Resolution of the Government of India, dated 9th August 1861.

The Committee, however, sent the Commissioner's letter on to the Bombay Cotton Trade Association, and suggested that if that body would contribute towards the amount which was required, the Chamber would supplement

their contribution, on the understanding, however, that Government would also contribute towards it. His Excellency the Governor in Council agreed to contribute Rs. 500 in addition to the sum stated by the Commissioner, S. D., to be available towards the prizes which he proposed to award; and your Committee informed him that the balance of Rs. 500 would be contributed by the Chamber and the Cotton Trade Association.—(*Appendix N.*)

CULTIVATION OF DIFFERENT KINDS OF COTTON IN THE KHANDEISH COLLECTORATE.

A correspondence which had lately passed between some of the district officers of Khandeish and the Collector of that district and the Commissioner, C. D., on the subject of the cultivation of different kinds of cotton, and the prices locally realized for cotton of each kind in certain talukas of Khandeish, was forwarded by the Commissioner of Customs to the Chamber with a request that he might be favoured with the views of your Committee on the points treated by Messrs. Robertson and Propert. The Commissioner expressed his surprise at the high prices of Waradi cotton, as compared with those ruling in the same locality for Hinghangat and Dharwadi, quoted in the statement appended to Mr. Propert's letter. If Mr. Propert's quotations were correct, there seemed to be but little present difference between the market values, weight for weight between the different kinds of cotton grown in Khandeish, and as there was no doubt that the average outturn per acre of the Waradi variety was very much larger in that district than that of all other varieties, the advantage of checking the cultivation of the Waradi plant seemed to be at least questionable. These papers were sent on to the Bombay Cotton Trade Association

for their opinion, and the opinion of that body, which was forwarded to the Commissioner of Customs, will be found in the appendix.—(*Appendix O.*)

ALTERATIONS IN THE TONNAGE SCALE.

In the month of June last, a requisition, dated the 16th of that month, was sent to the Chairman requesting him to call a General Meeting of the Chamber to consider the advisability of altering the Tonnage Scale for seeds and wheat, and to pass such resolutions as might be agreed to. The requisition was signed by 25 members, and a Special General Meeting of the members of the Chamber was convened to be held on the 20th of July 1883.

A few days afterwards, the Committee were requested to test, in the usual way, the following articles mentioned in the Tonnage Scale, namely, wheat, gingelly seed, rapeseed, and mustard seed, and to state how many cwts. of each article were contained in 40 cubic feet, with the view of confirming the measurements given in a report of the Chamber dated 3rd January 1879. The information solicited was required for the General Meeting at which the adjustment of the present Tonnage Scale was to be discussed. The measurement of these articles was accordingly tested by the Committee, in the usual way, with the following results:—

WHEAT (Ekdani)

Soft White from Jubbulpore	.....	18	cwts.	in 40 cubic feet.
Teelseed, from Hingunghat	.....	15	”	”
Rapeseed (Guzerat)	.....	16	”	”
Mustard Seed	.....	16	”	”

A letter, dated 26th June, was also addressed to the Chairman, signed by the P. & O. S. N. Co., the British India S. N. Co., Austrian Lloyd's S. N. Co., Messrs. Edward

Bates & Co., the "Clan" Line, the Bombay and Persia S. N. Co., and the Navigazione Generale Italiana, notifying that for the reasons given in their protest addressed to the Chamber in January 1879, when the question was previously under discussion, they still considered it was very undesirable that any change should be made in the existing Tonnage Scale, which was now so generally known and well understood by shippers and shipowners, and that they could not recognize any departure from the resolution passed by the Chamber, when the present scale was agreed to in 1872, which fixed 16 cwt. as the maximum for goods carried by weight.

A letter dated 13th July, signed by 17 captains of steamers in the harbour, was also received by the Chairman, protesting against any change being made in the Tonnage Scale, unless with the mutual consent of skippers and shipowners.

Letters were also sent in to the Chamber by several charterers and shippers of tonnage in favour of the proposed alterations.

All these documents were read and submitted to the Special General Meeting of the Chamber before the discussion began.

At the Special General Meeting, the following resolutions were, after full discussion, passed :—

1. That Rule I. prefixed to the Tonnage Scale be cancelled, and the following Rule be substituted :—That the Tonnage Scale for steamers shall be on the basis of 40 cubic feet to the ton, but in no case to exceed 20 cwt. dead weight.

2. That the following alterations be made in the Chamber's Tonnage Scale for steamers, and that the same come into force on the 1st January 1884 :—

Wheat	from 16 cwt.	to 18 cwt.	to the ton.
Teelseed	" 14	" 15	" "
Rapeseed	" 14	" 16	" "
Mustardseed	" 14	" 16	" "

A pamphlet giving the proceedings of the Chamber in

connection with the resolutions passed at the Special General Meeting on 20th July, was forwarded to all the leading Chambers of Commerce, Steamship Associations, and Shipping Newspapers, in England.

Numerous letters have since been received from Steamship Companies in England, protesting against the resolutions passed by the Chamber, and suggesting that the question might be discussed and settled by a joint committee of merchants and shipowners in London; but as the resolutions making the alterations were, after full discussion, passed by large majorities, the request to refer the matter to a joint committee came too late to be complied with.

Members will be interested to learn that the Kurrachce Chamber have since the General Meeting on the 20th July passed the following resolution:—"That with the view of having a uniform Tonnage Scale for Western India, the Bombay Tonnage Scale be adopted for this Port, and that the same come into force on 1st January 1884."—(*Appendix P.*)

ADDITIONS AND ALTERATIONS IN THE TONNAGE SCALE.

At the Special General Meeting of members held on the 5th of December 1883, the following additions and alterations were sanctioned by the Chamber:—

ADDITIONS.

	Steamers. To the ton.	Ships. To the ton.
Salt	{ 28 Indian maunds of 82½ lbs.	28 Indian maunds of 82½ lbs.
Bone Meal and Bone Dust...	20 cwt.	20 cwt.
Buffalo Horns in bundles...	6 cwt.	8 cwt.
Ground-nuts, unshelled.....	6 cwt.	8 cwt.

ALTERATIONS.

	Steamers. To the ton.	Ships. To the ton.
Jowaree, Bajree, and Lang.	18 cwt.	20 cwt.
Mussoor (in bags)	20 cwt.	20 cwt.
Mowra Flowers	18 cwt.	20 cwt.
Rice	18 cwt.	20 cwt.

The proceedings of the Special General Meeting will be found in the preliminary part of the completed Report.

UNIFORM TONNAGE SCALE AT ALL THE INDIAN PORTS

Further correspondence between the General Shipowners' Society, London, and the Bengal Chamber, and a letter from the former body to the Bombay Chamber, on the subject of an uniform scale for ships and steamers, were considered by your Committee; but the communications which they had received from the Bengal Chamber on the subject were expressed so strongly as to preclude all hope of any agreement being come to with Calcutta. Your Committee added that if they saw that the Bengal Chamber were prepared to correct and simplify their scale, no doubt the merchants of Bombay would be willing to join in a movement for securing uniformity at the various Indian Ports.—(*Appendix Q.*)

THE PORT TRUST, 1883-84.

The estimates for the year 1883-84 showed a surplus of Rs. 2,34,000, of which Rs. 1,00,000 would be applied towards the Sinking Fund, which would be applicable either for the reduction of capital debt, or for the prosecution of new works for which money would otherwise have to be borrowed. It was suggested that part of the remainder (about half a lac) should be applied in reducing the port

dues on shipping. Your Committee having been asked whether they considered this appropriation desirable, or whether they would, instead, recommend the application of the amount towards reducing the rates on any article or articles of export or import, were of opinion that the proposal to reduce the port dues on shipping from 2 annas to $1\frac{1}{2}$ annas per ton was desirable, but they at the same time strongly recommended that these dues should be reduced to 1 anna per ton now if possible, or as soon as might be considered practicable.

The Budget Estimate for 1883-84, and the Administration Report 1882-83, will be found in *Appendix R*.

· REDUCTION OF PORT DUES.

The Government of Bombay having approved of the proposal of the Port Trustees to reduce the rate of port dues from 2 annas to $1\frac{1}{2}$ annas per ton, desired that the necessary amendment of the Indian Ports Act, 1875, might be made by striking out the words "and not less than 2 annas per ton" in the third column of Schedule I. of the Act. If this were done, Bombay would be in the same position as Calcutta in not being tied down to a minimum rate of port dues. The Government of India considered that there was no doubt as to the expediency of the course proposed, and a Bill amending the Indian Ports Act 1875 was accordingly introduced into the Legislative Council of the Governor-General and passed.

THE RATE OF INTEREST PAYABLE BY GOVERNMENT ON THE PORT TRUST DEBT.

In the course of last year the Port Trustees, in anticipation of the interest on their debt being raised in June 1883 to $4\frac{1}{2}$ per cent., asked Government to assist them with their

guarantee in raising money to pay off their debt by means of which they estimated that the revenues of the Trust would be relieved to the extent of Rs. 1,43,000 per annum. The authorities on this side, who were familiar with the peculiar circumstances under which so large a debt had been imposed on the Trust, assented, but Her Majesty's Secretary of State for India refused to sanction the proposal. When the Port Trust was formed, the interest on its debt was fixed by Government at 4 per cent. for the first 10 years, which ended on 25th June 1883 ; and at 4½ per cent. thereafter ; and the Trustees, after the refusal of the Secretary of State had been communicated to them, submitted a proposal that the present rate of interest should be continued for a further period of 10 years, but this the Government of India declined to entertain.

Your Committee also addressed Government on this important subject. After referring to the circumstances under which the Port Trust was formed, and its debt imposed on the trade, they proceeded to express their regret that neither of the proposals of the Port Trustees had been accepted by Government. Their request that Government would assist them with its guarantee in raising a loan to repay their debt to Government would have imposed no additional liability on Government, and no further financial responsibility than what already existed. In regard to the second proposal, which the Governor-General in Council had rejected on the ground that it would be a sacrifice of the imperial revenue to the extent of more than a lac of rupees yearly, the facts showed that, in the arrangement of the Bombay Port Trust debt, the imperial revenue, that is to say, the general tax-payers, had profited to the extent of about 30 lacs of rupees at the expense of the local trade of Bombay, and that, had the trade not been arbitrarily

burdened to that extent, the high rates, which were now levied to pay interest on a charge that did not belong to it, and ought never to have been imposed upon it, would have been unnecessary. The position of the Trust had, with extended railway communication, and the growth of trade, greatly improved of late; but your Committee submitted that they saw no reason why the Government of India should continue to burden the trade with interest on that debt, while on the other hand it seemed to them to be indisputable that the trade of the Port was fairly entitled to the full benefit of the natural increase which its geographical position, and the opening up of the country, brought to it. Your Committee concluded by requesting that His Excellency the Governor in Council would kindly forward a copy of their letter to the Government of India. His Excellency, however, regretted that he was unable to meet the wishes of the Chamber in this respect as in view of the very recent decisions on both of these subjects by the authorities above mentioned, His Excellency considered it inexpedient for Government to move further in the matter. Your Committee thereupon forwarded the correspondence direct to the Government of India respectfully submitting that the Chamber had a right to be heard in a matter of so much importance to the trade of Bombay and upon which the decision lay, not with the Local but with the Supreme, Government; and they hoped that the applications of the Port Trustees might receive the favourable consideration of His Excellency the Governor-General in Council. The Government of India, with reference to the main argument of the Chamber that the revenues of the Port were unduly and unfairly burdened by the charge made upon them for the purchase price of the Elphinstone and other properties made over to the Trust when it was

constituted, observed that the question had been settled in 1871, after very careful consideration by the Government of India and with the full and willing consent of the Government of Bombay representing the interests of the Port; and they considered that it could not now be reopened: that the only question now open to consideration was whether the finances of the Port were in such a condition that the charge for interest was too heavy to be borne at the present time. The Government of India could not admit that this was the case, as the finances of the Port Trust were at present in a very prosperous condition. The Governor-General in Council, therefore, regretted that he could not depart from the decision already arrived at with regard to the rate of interest to be paid by the Port Trust; and that in view of the decision of Her Majesty's Secretary of State, he was unable again to recommend that the Provincial Government should guarantee a loan to be raised in the market by the Trust for repaying the debt due to Government.—(*Appendix S.*)

WORKING OF THE COAL TRADE ON THE BUNDERS.

The system of work proposed to be followed by the Trustees at the Coal-yard at Mallet Bunder was submitted to the Chamber, with a request that they would state whether or not the proposals of the Traffic Manager would suit the views of the Chamber. The papers were submitted to those merchants who were principally interested in the coal trade; and after further correspondence between the Trustees and the Chamber, your Committee informed the Trustees that the proposal that the landing and delivery of coal be undertaken by the Port Trust, through the medium of a landing contractor, seemed to commend itself to the

trade. To carry out this proposal, however, a regular working agreement between the Trustees and those merchants who were prepared to support the proposal would be necessary in which a detailed scheme could be settled.— (*Appendix T.*)

QUARANTINE IN EGYPT.

On the 15th May last, the following telegram received from Her Majesty's Consul at Alexandria was forwarded to the Chamber by Government :—

“ Owing to sudden increase of cholera at Bombay Sanitary Board declared Bombay contaminated and quarantine in proportion to duration of voyage is imposed from to-day according to published regulations.”

Your Committee had supposed that the Resolution of the Government of Bombay, dated 6th March 1882, appointing a permanent Medical Board to report to Government on every Friday, whether the cholera usually to be found in Bombay had assumed an epidemic form, would have induced the International Sanitary Board at Alexandria to defer imposing a vexatious and unnecessary quarantine until the report of the Medical Board had been communicated to them. Your Committee believed that it would then have been found that the amount of cholera which at that time existed in Bombay was not greater than usual at that time of year: that it consisted of a few scattered cases, and that the prevalence of it at the village of Coorla was attributable to local causes which might have been prevented. The measures adopted by the Government, under that Resolution, were sufficient to prevent any possible danger to Egypt from cholera; but in spite of this the Egyptian Sanitary Board had, on apparently imperfect information, imposed quarantine on vessels coming from

Bombay, by which the public would, probably for months, be unnecessarily subjected to an intolerable inconvenience, and the shipowning interests to grievous injury and loss. The effect of the imposition of quarantine would be felt throughout Europe and the East in the detention of Mail and other steamers, and in the vexatious and expensive hindrances and regulations to which vessels were subjected. Pilots were not permitted to come on board the vessels, but proceeding ahead in tugs, hired at exorbitant prices, misled the vessels on to the banks and shoals. Your Committee observed that quarantine was imposed or removed by the International Sanitary Board at Alexandria, and it was impossible to exaggerate the loss of time and money which had arisen from the action of this Board, which was apparently an irresponsible body composed of delegates sent from various countries. Upwards of 80 per cent. of the traffic of the Canal belonged to Great Britain ; and your Committee respectfully suggested whether, as the only means of removing the vexatious and unnecessary restrictions which were constantly imposed on the trade of India, endeavours might not be made by Her Majesty's Government to procure the abolition of the International Sanitary Board and the transference of its functions direct to the Egyptian Government, who doubtless would deal with all questions effecting the public health of Egypt from purely sanitary considerations. The medical profession were of opinion that free pratique could be given to all ships arriving at Suez from Bombay with a clean Bill of Health during the whole voyage ; that the period during which cholera lay latent in the system was so short that there was not the least danger of its being introduced by passengers, and that, in fact, no instances were known in which cholera had been so introduced from India to Egypt. Your Committee, therefore, protested against the imposition

of this vexatious and unnecessary quarantine and further expressed their earnest hope that His Excellency the Governor in Council would by incessant remonstrance with the Egyptian authorities, and by urgent representations to the Government of India, and Her Majesty's Government, do all that lay in his power to procure its immediate removal, and so put a stop to the inconvenience and loss which the public and shipowners must suffer, and that, as time was a great object, he would kindly telegraph his representations to these authorities. Your Committee further despatched the following telegram to the London Chamber of Commerce:—"Please urge Lord Granville to press Egyptian authorities to remove quarantine Suez Canal. Restrictions vexatious, unnecessary. Public health Bombay perfectly good."

His Excellency the Governor in Council, in acknowledging the receipt of this letter, stated that the reports of the medical Board at Bombay were telegraphed every week to the British Consul at Alexandria, and that an emphatic protest against the imposition of quarantine had already been made by the Bombay Government. Further that a copy of the Chamber's letter had been forwarded to the Government of India with an intimation that His Excellency the Governor in Council entirely concurred in the view therein stated that the returns of cholera in the city and island of Bombay showed no alarming increase or symptoms of an epidemic character, and trusted that Her Majesty's Government would, without delay, be moved to insist on the removal of a wholly unnecessary interference with trade; and the Government of India in their despatch to the Secretary of State dated 15th June last, transmitting copies of the letter from the Bombay Government and of the remonstrance from the Chamber, stated that the action of the Egyptian Sanitary Board appeared to them to have been in this case even more

than usually hasty and ill-considered, and they trusted that early measures might be taken either to reform the constitution of the Board or to limit the powers of that body. A telegram dated 5th July was received from Her Majesty's Consul at Alexandria, stating that vessels could pass the Canal without communication ; that Gibraltar at present admitted such vessels provided it was conclusively proved that there had been no communication whatever ; and that Malta would not receive them in pratique.—(*Appendix U.*)

THE CUSTOMS TARIFF OF MOZAMBIQUE.

In March last the Government of Bombay forwarded to the Chamber copies of certain papers regarding a modification recently made in the existing Customs Tariff of Mozambique, which would sensibly affect the trade carried on by Bombay with that Colony, and requested that Government might be favoured with the views of the Chamber on the subject, after consultation with the principal firms interested in the trade of Mozambique. On receiving this communication, your Committee forwarded the papers to the Millowners' Association, observing that the alteration was principally directed against Indian manufactured goods and Yarns, and that this had probably arisen from the fact that Spinning and Weaving Factories were now being established in Portugal to which Mozambique belonged. Your Committee further suggested that if the Millowners' Association took the matter up, they might either address Government direct on the subject, or, if they thought proper to address the Chamber, the Chamber would be happy to forward their representation to Government.

From the papers received it appeared that Article 41 of the existing Tariff was substituted by the following :—

Article 41.—All goods coming from Foreign Ports will pay the

duties laid down in the respective tables, subject to the following exception :—

Exception.—All merchandise similar to that of European manufacture coming from any Foreign Ports of Asia or Africa shall pay a duty of 20 per cent. in addition to those laid down in the Tariff.

Article 41.—Goods coming from Portugal, the adjacent islands on the Portuguese ultramarine possessions, and of national manufacture, shall pay only 60 per cent. of the duties laid down in the Tariff, excepting powder, arms, and spirits, which shall pay full duty.

Exception.—Cotton or woollen or linen textures of Portuguese manufacture, which shall be free of all duty for the space of ten years.

The effect of the additional duty of 20 per cent. which the modification in the Tariff imposed only on Indian cotton manufactures imported into Mozambique, and not on the cotton manufactures imported from England, America, and other countries, would be to very greatly diminish the trade.

The Millowners' Association addressed a memorial to His Excellency the Viceroy, in which they earnestly hoped that His Excellency would urge the Government of India and, if necessary, Her Majesty's Government, to make such remonstrances with the Government of Portugal as would induce them to cancel the proposed modification of the Tariff: and this memorial having been sent in to the Chamber, your Committee, who concurred generally in the views therein set forth, requested that His Excellency the Governor in Council would kindly forward it for the immediate and favourable consideration of the Government of India. Further communications received from Government intimated that the Portuguese Government had refused to assent to the alterations proposed by the Government of Mozambique.—(*Appendix V.*)

TASAR SERI-CULTURE IN THE BOMBAY PRESIDENCY.

A report of Major Coussmaker, Superintendent Government Photozincographic office, of the progress made in Tasar seri-culture in this Presidency during the year 1882, forwarded by Government to the Chamber, will be found in *Appendix W*.

PROPOSED NEW SUEZ CANAL.

On the 17th July last, a telegram was received from the London Chamber of Commerce stating that commercial opinion in England was strongly opposed to the Suez Canal proposals of the Government, and that British interests were insufficiently protected, and requested the opinion of the Chamber by telegraph. The following reply was immediately despatched by wire:—

“British Government proposals not clearly understood here. Chamber not opposed to any arrangement providing for prompt and substantial reduction of rates and for British Government control proportionate to British interests. No other satisfactory.”

At this time all that was known of the proposals of the British Government on this question was what appeared in Reuter's telegrams published in the newspapers on the 13th July, and which were as follows:—

Dated London, July 11:—“The Chancellor of the Exchequer made the following statement in the House of Commons to-day concerning the Suez Canal. An agreement with M. DeLesseps has been signed providing for the construction of a parallel Canal, which will be completed in 1888. The reduction of the present Tariff will commence on January 1st next year. Vessels in ballast will pay 2½ francs per ton less than those carrying cargo. As the dividends increase,

the pilotage dues will be remitted. The British Government provides for the new undertaking a capital of £8,000,000 sterling at $3\frac{1}{2}$ per cent. interest redeemable in fifty years. Endeavours will be made to obtain a prolongation of the concession to the Company. An English Vice-President will be appointed. The agreement will require the sanction of Parliament."

Dated London, July 12 :—"The agreement signed with M. DeLesseps in connection with the Suez Canal further states that the transit dues after the profits of the Company exceed 25 per cent., will be reduced by fifty centimes per ton, making a reduction of $2\frac{1}{2}$ per cent."

PRINCIPLES ON WHICH AWARDS WERE BASED ON CASES SUBMITTED TO THE CHAMBER FOR ARBITRATION UNDER THE RULES PASS- ED ON THE 3RD AUGUST 1880.

A dispute as to the meaning of a Shipping Order which contained the following clause,—“Goods to be measured for tonnage according to the Chamber of Commerce rules, notice of which to be given to the Captain.” The Shippers contended that under this order freight should be payable by measurement of 40 cubic feet to the ton, whereas the Captain refused to take in the goods if not by weight of 16 cwt. The question arose whether cargo weighing more than 16 cwts. to the ton and not being included in the Chamber's Tonnage Scale went under the denomination of measurement cargo of 40 cubic feet to the ton or as dead weight of 16 cwt. to the ton.

Cargo weighing more than 16 cwts. to the ton and not specially provided for in the Tonnage Scale, may be taken by steamers on weight or measurement at their option.

The word “measured” in the shipping order meant “computed.

CRIMINAL PROCEDURE CODE, 1882, AMENDMENT BILL.

This Bill, which proposed to modify the existing law and remove the present bar upon the investment of Native Magistrates in the interior with powers over European British subjects, was, in the early part of this year, introduced into the Council of His Excellency the Governor-General of India. The Bill proposed the following amendments :—

In Section I. it amended Section 22 of the Code, which provided that only European British subjects could be appointed Justices of the Peace, and gave the Government power to appoint to that office such persons as it thought fit belonging to the following classes :—

- (a) Members of the Covenanted Civil Service ;
- (b) Members of the Native Civil Service constituted by the rules made under the Statute 33 Vic., cap. 3 ;
- (c) Assistant Commissioners on Non-Regulation Provinces ; or
- (d) Cantonment Magistrates ;

and being persons invested with the powers of a Magistrate of the first-class.

Section II. amended Section 25 of the Code, and made all Sessions Judge and District Magistrate *ex-officio* Justices of the Peace.

Section III. repealed so much of Section 443 of the Code as limited jurisdiction over European British subjects outside the Presidency-towns to Magistrates who were themselves British subjects.

Section IV. repealed the similar provision of section 444 of the Code with regard to Sessions Judges.

Lastly, Section 450 of the Code, which provided for the case where the Sessions Judge of the division within

which the offence was ordinarily triable was not an European British subject. The same section of the Bill also repealed so much of Section 459 of the Code as provided that the section should not be deemed to confer on Magistrates and Sessions Judges outside the Presidency-towns, not being European British subjects, jurisdiction over European British subjects.

Your Committee deemed it advisable that, in a measure affecting a large and important section of the population, the opinion of the Chamber should be taken; and a Special General Meeting of the members of the Chamber was therefore called, on the 6th March last, to consider the provisions of the Bill. At this Meeting the following resolutions were passed almost unanimously, there being only three native members dissentients:—

1. That, in the opinion of this Meeting, the Bill for the amendment of the Criminal Procedure Code, is, under existing circumstances, uncalled for, and ought not to have been introduced without first eliciting the opinions of the non-official classes whom the proposed change in the administration of the law will affect.
2. That the following members of the Chamber, namely, the Chairman of the Chamber, Mr. M. Mowat, the Hon'ble W. M. Macaulay, Messrs. Bythell, Russell, L. R. W. Forrest and Blascheck, be appointed a Sub-Committee with power to add to their number, to prepare a memorial to the Viceroy, praying that His Excellency may be pleased to abandon the proposed alteration in the law.

A memorial was prepared accordingly and forwarded to His Excellency the Viceroy through the Local Government. Your Committee need hardly add that the Bill, which is still before the Council of the Governor-General, has been condemned throughout the country, by large majorities of the classes whom it would affect.—(*Appendix X.*)

JAIL MANUFACTURES.

A representation was made to the Chamber that efforts were being made to obtain a reconsideration of the Resolution of the Government of India, dated 22nd September 1882, which treated of the principles which ought to regulate the action of Government in this country in the matter of Jail manufactures. The Resolution referred to was accepted as a very satisfactory solution of the question how far the Jail factories of India might be permitted to compete with private manufacturing industries, and the principles laid down in it were everywhere received with approval by the mercantile and trading interests of the country. The Resolution aimed at reducing the competition to a minimum, and considering the importance of removing all obstacles to the spontaneous development of manufacturing Industries in India, the Committee believe that it would be nothing short of a misfortune to the country if any deviation from the terms or spirit of it were authorized. Your Committee accordingly addressed Government on the subject expressing their hope that, should the question come before Government, His Excellency might be pleased to uphold the policy of the Government of India as enunciated in the Resolution above mentioned; and requesting that a copy of their letter might be forwarded to the Government of India.

SAMPLES OF MAHABLESHWAR ARROWROOT.

Papers were forwarded to the Chamber showing results of the experiments as to the production of Arrowroot undertaken at Mahableshwar in accordance with the orders issued by Government in July 1881. The ground did not seem to have been suitable; it was carefully prepared and planted with Arrowroot in the latter part

of the monsoon, but the experiment was a failure.—
(*Appendix Y.*)

WATER SUPPLY IN BOMBAY.

The attention of your Committee having been drawn to the proposals contained in the statement of extraordinary Municipal expenditure recently issued, they thought it desirable to submit to the Municipal Commissioner their opinion that the city required a much larger supply of water than it now possessed, and that as any large and comprehensive scheme would take years to complete, the Commissioner's proposals to augment the present supply as far as practicable, without loss of time, had their approval, and they added that as soon as more water was available, the Fire Brigade should be materially strengthened.

THE INDIAN EXPLOSIVES BILL, 1883.

A copy of this Bill, with the Statement of Objects and Reasons, was forwarded by Government to the Chamber with a request that it would favour Government with any remarks which it might desire to offer on the subject of the proposed measure. A Special Committee, composed of the Chairman, the Hon'ble W. M. Macaulay, Messrs. Wood, Brunton, Mackay and Ormiston, was appointed to consider and report on the provisions of the Bill. Their report, which was adopted and sent in to Government, will be found in *Appendix Z.*

THE INDIAN STEAM-SHIPS BILL, 1883.

A copy of this Bill, with Statements of Objects and Reasons, was forwarded to the Chamber with a request

that Government might be favoured with its views on the Bill. A Special Committee, consisting of the Chairman, Messrs. F. D. Parker, R. S. Campbell, J. L. Mackay, J. Shepherd, W. Cooper and J. Dobbie, was appointed to consider its provisions; and their report, which was adopted and sent in to Government, will be found in *Appendix AA*.

THE INLAND STEAM VESSELS BILL, 1883.

A copy of this Bill, with Statement of Objects and Reasons, was forwarded to the Chamber with a request that Government might be favoured with the views of the Chamber thereon. The same Committee, who reported on the Indian Steam Ships Bill, 1883, was also appointed to consider the provisions of this measure. Their report, which was adopted and sent in to Government, will be found in *Appendix BB*.

POSTAL ARRANGEMENTS BETWEEN BOMBAY AND KARACHI.

A memorial, addressed by the Karachi Chamber of Commerce to His Excellency the Viceroy praying for the re-opening of the overland postal line between Bombay and Karachi *via* Ahmedabad and Hyderabad (Sind), was forwarded by that body to the Chamber with a request that it would co-operate with them in furthering their proposal. It appeared that the Government of Bombay in its Resolution of 12th January 1883 was of opinion that it was expedient, for reasons postal and political, to maintain the present subsidised line between Bombay, Karachi, and the Persian Gulf, but thought that a higher rate of speed should be maintained between Bombay and Karachi, and that un-

less this was satisfactorily provided for, the second weekly steamer between Bombay and Karachi should not be subsidised. These postal arrangements proposed for Sind were considered by the Karachi Chamber to be most unfavourable. They thought that it would be more for the general interest of that Port if it were placed in daily communication with Bombay, even at the sacrifice of the second mail-steamer, and that the daily overland service between Bombay and Karachi should, on the expiry of the existing mail contracts, be restored. In this opinion your Committee concurred with the exception of the suggestion to withdraw the subsidy to the bi-weekly steamer, which they would like to see still continued. The opinion of the Karachi Chamber, as representing the mercantile community, that the land postal line should be re-established, was supported by other public bodies in that city, as well as by the Collector of the district, and by all those to whom regular postal communication with the Presidency was an object; and your Committee ventured to express their hope that the great and increasing importance to which the Port of Karachi had now attained, might induce His Excellency the Governor in Council to reconsider the subject, and obtain for it the boon of a regular daily service, by the restoration of the overland line. The Government of India, to whom these proposals were referred, stated that statistics, expressly taken for the purpose of ascertaining if the expenditure to be incurred would be covered by the receipts from the land line *via* Singam, had shown that the correspondence affected did not warrant the large expenditure involved in the re-establishment of the line, and the Government of India concurred with the Bombay Government in regarding the restoration of the Singam line as inexpedient. With regard to the dissatisfaction expressed by the Government of Bombay with the existing

sea service, the Government of India pointed out that, while the present contract provided a speed of $7\frac{1}{2}$ miles an hour, the tenders for the new sea service contemplated a speed of 10 knots an hour for the direct service between Karachi and Bombay, and 9 knots an hour for the second weekly steamer that had the option of calling at the chief intermediate Ports.—(*Appendix CC.*)

PROPOSED LINE OF RAILWAY FROM GODRA TO RUTLAM.

The Chamber in September 1881 submitted for the consideration of His Excellency the Governor in Council the great benefit that would accrue to the trade of Western India from the construction of a broad-gauge line from Godra to Rutlam and from Rutlam to Gwalior. From the correspondence which subsequently passed, the Chamber learned that His Excellency had recommended the survey between Godra and Rutlam, but that he considered the proposal, as regarded the extension from Rutlam to Gwalior to be not one to be accepted; and that the Government of India concurred in this view, but added, with regard to the junction between Godra and Rutlam, that a further communication would be made to His Excellency after the opinion of the Governor-General's Agent, Central India, had been received. His Excellency subsequently informed the Chamber that the Government of India had intimated that after a careful review of the facts and circumstances they had finally decided not to sanction the prosecution of the survey for a line of railway between Godra and Rutlam. Your Committee, however, were gratified to learn that at the request of the B. B. and C. I. Railway Company His Excellency had been pleased again to urge upon the Government of India the desirability of this survey being

undertaken. The time which had elapsed since the Chamber's suggestion in 1881 was submitted, had enabled the B. B. and C. I. Railway Company to ascertain the nature of the traffic on their extension from Pali to Godra, and the direction of the districts from which the traffic came. A statement furnished by the Company showed that a large proportion of the traffic came from the districts eastward of Godra, and that, notwithstanding the difficulties of transit over tracts through which good road accommodation was very limited before the railway station was reached, there had already been a large increase of traffic from Godra in the export of some of the most important articles. These results seemed to your Committee to prove that the extension of the railway from Godra to Rutlam would greatly stimulate production in the districts, and enlarge the volume of their trade, and that the net revenue, which would be derived from the extension, would yield a fair return on the capital expended. While the development of the districts would probably be followed by a large local traffic, the receipts from the through traffic would also, there was reason to believe, be considerable, to say nothing of the great benefit which would accrue to the State, as well as to the people, from the opening up of the districts themselves, and of direct communication between Central India, Guzerat, and Kathiawar.—(*Appendix DD.*)

EXTENSION OF THE BHOPAL STATE RAILWAY THROUGH LALITPUR AND JHANSI TO GWALIOR WITH A BRANCH FROM JHANSI TO CAWNPORE.

Your Committee addressed a memorial to Her Majesty's Secretary of State for India pointing out the great benefit which would be derived by the country from the construction of this line on the broad-gauge; and praying

that his Lordship might be pleased to accord his immediate sanction to it. The line between Bhopal and Cawnpore would, as shown by the Government of India, if carried *via* Mhow, Ranipur and Tehree, act as a protective line to Bundelkund, which was subject to periodical drought; and the Government of Bombay considered that it would be preferable to any other line intended to shorten the railway route between Bombay and the North-West Provinces. The Agent, Governor-General for Central India, had declared that the scheme was one which, after the fullest consideration and consultation with all the authorities connected with that part of India, he had accepted and adopted as an absolutely indispensable line for opening out that most important province; that the country which it would open out from Bhopal to Gwalior was, in the lower portions, exceedingly rich in wheat and well peopled, and certainly there were no great difficulties in the way of railway construction; that in the neighbourhood of Bhopal and Bhilsa the production of wheat was so enormous in good years that it lay rotting on the ground because there were no means of exportation; and he believed that, above Bhilsa, and between Jhansi and Gwalior which he knew well, the country was fertile and populous. While we had thus the united testimony of the highest authorities in India to the expediency of this scheme as a protective, and locally reproductiv^e, work, your Committee urged, in addition to the reasons already mentioned, the great importance of its immediate construction for the further development of the Indian wheat trade, which, notwithstanding the competition of America, Russia, and other countries, was now assuming great imperial proportions. Your Committee believed that India could, with proper and adequate railway facilities, supply the whole of the wheat required by England, as well as a large quantity of that required by the

Continent, and that it was incumbent on the Government to develop these capabilities by means of largely extended railway communications, which augmented the land revenue, and at the same time promoted the best interests of the people and of commerce. As the Government of India recognized more fully the advisability of increased railway communications, and the proposed line was of very great importance, it would sooner or later be made; and your Committee believed there were no serious obstacles to its construction, which could not long ere this have been removed.—(*Appendix EE.*)

THE NAGPUR-BENGAL RAILWAY.

A correspondence between the Government of India and the Bengal Chamber of Commerce on the question of railway communication between the Central Provinces and Bengal came under the notice of your Committee, who were of opinion that the early construction of a line on the broad-gauge connecting Nagpur with Calcutta, while it would be of great benefit to Bengal and the country generally, would be of the utmost importance to this Presidency, and particularly to the Port of Bombay. Your Committee considered that the weight of argument was in favour of the Sitarampore route, and was sufficient to justify Government in taking up and carrying through that project first. Your Committee urged strongly upon the Government that this line should be constructed on the broad-gauge, and they hoped that the Government of India would not permit the error which was made in constructing the Rajputana-Malwa line from the Sabarmati to Agra and Delhi on the narrow-gauge to be repeated in this case, and the permanent interests of the country to be partially sacrificed to the views entertained in some quarters that there would be a saving in the first cost of the line, if made on the narrow-

•

gauge, and therefore that it would be more expedient to construct it on the narrow than on the broad gauge. The exigencies of the Indian wheat export trade required the wheat to be hurried down to the port of shipment before the S. W. Monsoon set in, so that it might arrive in England before the harvests in Europe were reaped ; and the delays and expense which were experienced at the transshipping station, where there was a break of gauge, and which in ordinary times were serious enough, might become ruinous to the trade by the desertion of labourers from epidemics, or for more profitable work in the districts, or by their refusal to work from sickness or other causes. Your Committee, after entering into the details of the scheme, expressed a hope that the line between Nagpur-Bengal would be constructed at an early date on the broad-gauge, and that the present Nagpore-Chattisgarh line, or any portion of it which might form part of the Nagpur-Bengal scheme, would be taken up and reconstructed on the broad-gauge, and they further hoped that the views of the Chamber on this important subject might commend themselves to H. E. the Governor in Council, and that he would be pleased to forward a copy of their letter to the Government of India, with an expression of his approval and support.—
(Appendix FF.)

THE JHANSI-MANICKPORE RAILWAY.

This scheme has also engaged the attention of your Committee, who were of opinion that it should be constructed on the broad-gauge. It was a line which had been recommended by the Famine Commission, but your Committee believed that it would also be a remunerative work, as the country in favourable seasons yielded luxuriant crops of cereals and cotton. It had, however, been

reported—and your Committee had heard the report with extreme regret—that efforts were being made by a party in the Indian Council to prevail on the Secretary of State to desire that this line should be constructed on the narrow-gauge, and the gravest apprehensions were being felt that his Lordship might also be induced to desire that the main extension proposed to be made by the G. I. P. Railway Company between Bhopal and Gwalior with a branch from Jhansi to Cawnpore should be constructed also on the narrow-gauge. Your Committee could only express their hope that the report had no foundation in fact ; but should it prove to be true, they desired to protest against a decision, in a matter so deeply affecting the commerce of India, formed on the representations of persons who were wholly unacquainted with the exigencies of the trade, and not upon the opinions of the Government of India, or of the Local Governments or the mercantile communities who were the most competent judges of the merits of the scheme and the requirements of the trade. If H. E. the Governor in Council approved of the views expressed by the Chamber with regard to the construction of this line on the broad-gauge, they hoped that H. E. would be so good as to forward their representation to the Government of India with an expression of his approval and support.—(*Appendix GG.*)

TRADE AND COMMERCE OF MACEDONIA.

In June last, Government forwarded to the Chamber copy of the letter from the Government of India, dated 21st May last, and its accompaniment, which was an extract from a report on the Trade and Commerce of Macedonia by Her Majesty's Consul at Salonica regarding the production of Opium in that province. The extract will be found in *Appendix HH.*

INTRODUCTION OF EGYPTIAN COTTON INTO
INDIA.

A communication was received from the Commissioner, S. D., stating that he had been able to import $1\frac{1}{4}$ ton of selected Egyptian cotton seed which had arrived in apparently excellent order, and would be issued to well-to-do ryots to sow in the best black soil in the Dharwar District in plots of not less than five acres each. The sowing would be carefully watched in the first instance, and every care would be taken that the crop was carefully weeded and attended to. The Kappas was to be brought to the Government factories to be ginned and the seed was to be re-issued from the factories in the following season; there was seed sufficient for 400 acres, and four prizes of Rs. 50 each would be offered for the four best five acre crops of Egyptian cotton; the result of the experiment would be duly communicated to the Chamber and samples sent for inspection; and if the experiment should happily prove fairly successful, next year he would import three tons of seed in addition to that obtained from the first crop. In reply to this communication your Committee pointed out that in former years numerous experiments had been made with Egyptian cotton in India and with different results; but the Committee were not aware that any serious attempt on a large scale had ever been made. Your Committee referred the Commissioner to a very successful experiment with Egyptian cotton, which was made by Mr. W. M. Hearn in August 1861, from which it would be observed that Mr. Hearn was satisfied that Egyptian cotton might be successfully raised during the monsoon in red soil in the talookas of Padshapoor and Beedee of the Belgaum Collectorate, and in many parts of Dharwar. The experiments made in Sind seemed to have been complete failures, all of which, however, were on a

small scale. Great efforts were made in the years 1859 to 1860 and 1860 to 1861 to improve the cultivation of Indian cotton, and a full account of them would be found in the Chamber's Reports for those years which were sent for the Commissioner's perusal.—(*Appendix I I.*)

EXPORT TRADE IN MOWRA FLOWERS.

A letter, dated 3rd July, was received from the Commissioner of Customs, requesting to be favoured with information on certain points bearing on the foreign export trade in Mowra Flowers. The letter was submitted to merchants interested in the export of this article and information on the points mentioned by the Commissioner solicited. The replies were pretty much to the same effect, and a reply in accordance therewith was sent to the Commissioner.—(*Appendix JJ.*)

WORKING IN THE HARBOUR ON SUNDAYS.

Complaints were made to the Chamber of the great loss and inconvenience caused to exporters by the rules which forbade the Prince's Dock gate being close on Sundays for the purpose of carting and piling cargo in the sheds, and your Committee addressed the Commissioner of Customs on the subject in the hope that he might be induced to accede to a modification of this rule during the monsoon months only, that is to say, from 1st June till 30th September, when the necessity for it really existed. The present Custom House rule with regard to Sunday working on board steamers in the harbour was submitted to the Chamber in General Meeting on the 14th July 1882, and approved with an addition that carting, landing, and

piling of cargo in the Prince's Dock should be permitted, which, however, the Commissioner declined to accept. Since that time the trade continued to increase, and the Dock had proved quite unequal to the requirements of the trade. The pressure was felt more particularly after the S. W. Monsoon set in, and was likely to continue during the monsoon months. There was not a berth vacant in the Dock, and numerous vessels were lying out in the stream waiting for admission. The wharf accommodation, moreover, was very small and crowded, and there were times when it was as necessary to send cargo to the sheds, as to work a steamer on a Sunday, especially in the monsoon, when it was of great importance to take advantage of every dry day, and Monday night, for instance, prove to be a very wet one.

Your Committee, therefore, requested the Commissioner, who had already recognised the principle of permitting work on Sundays in emergent circumstances, to reconsider his decision and permit carting and loading in boats at the export bunders, or carting or piling at the Prince's Dock on an extra fee in each case of Rs. 50, during, however, the monsoon months only, when the necessity for it really existed. To this communication, however, no reply has been vouchsafed by the Commissioner.

**PROPOSAL TO ESTABLISH A SIGNAL STATION
AS FAR DISTANT FROM BOMBAY AS POSSI-
BLE FROM WHICH THE EARLIEST INTELLI-
GENCE MIGHT BE RECEIVED OF OCEAN-GOING
VESSELS APPROACHING BOMBAY.**

A letter was received from Government forwarding one received from Lloyd's, and desiring to be informed what faci-

lities there might already exist in the vicinity of Bombay for reporting ocean-going vessels, especially steamers approaching the Port, and also to be favoured with the views of competent critics as to the points at which it might be best to establish such a station, and as to the cost that would be incurred in connecting that station by telegraph wire with the general telegraphic system of India. Your Committee forwarded this letter to the Port Trustees inquiring whether the introduction of such an arrangement, as had been suggested by the Committee of Lloyd's, would be attended with much expense. The Port Trustees observed that there was no place further to the westward, whence 90 per cent. of the ocean-going steamers that come to Bombay arrive, than Colaba Point from the Old Lighthouse on which all vessels entering the harbour were now signalled.

From the Lighthouse on Kennery Island, coasters approaching Bombay from the south would probably be signalled 50 minutes sooner than from Colaba, but it was not considered to be worth while incurring the expense of connecting Kennery with Bombay by telegraph for the purpose.

Your Committee, therefore, stated in reply that, in their opinion, it was not practicable to obtain earlier intelligence of ocean-going vessels approaching Bombay than was now received from the Colaba Lighthouse, but that if Lloyd's desired earlier information than they now received, they should arrange with Reuter's Telegram Company to send immediate telegrams directly they received information from the Colaba Lighthouse through the telegraph office.

A FAIR DAY'S DISCHARGE FOR AMERICAN PETROLEUM VESSELS.

Some years ago the Committee of the Chamber ruled that 2,500 cases of kerosine oil should be considered a fair day's discharge for American Petroleum ships. In July last, however, representations were made to the Chamber that the custom of the Port was considerably less, and your Committee were asked to re-consider the question. It was pointed out that in Calcutta many oil ships discharged their cargoes in quantities averaging only 1,500 daily, and that there was a movement at that Port among the ship agents to increase the custom to 2,000 cases per diem. Your Committee having submitted these representations to some of the largest importers of kerosine oil, and asked for a list showing the actual averages of their most recent discharges of oil-ships, distinguishing steamers from sailing vessels, carefully considered the replies which were received; and were of opinion that they afforded substantial ground for altering the decision which had in former years been arrived at, and they decided that 2,000 cases of kerosine oil should be taken as a fair day's discharge for sailing vessels of any tonnage.

GROWTH OF TOBACCO IN THE KAIRA DISTRICT.

Government had an experiment carried out at Nariad in the Kaira district of having some of the locally grown tobacco cured under European supervision. The Nariad tobacco had amongst the natives of India a very wide reputation, and fetched a high price, so much so that the best tobacco was sent to Central India and distant Provinces. The Collector asked whether any of the firms belonging to the Chamber would be likely to interest themselves in the

matter, and give their opinion (1) as to what the tobacco would be likely to fetch in the European or local markets ; (2) as to its quality as compared with other tobaccos ; and added that if any gentlemen wished to see samples of the tobacco he would be happy to send them down. Your Committee recommended that samples of each of these descriptions should be sent to Messrs. Neuberg & Co., Tobacconists of this city, for report on their quality and value in the local markets. Your Committee further suggested that samples of the cured tobaccos, with a description of the process of curing, should be forwarded to London, Gibraltar, and Marseilles, for reports on the quality of the tobacco and the value of each kind in those markets, and the Chamber would, if the Collector desired it, be happy to transmit the samples, and if possible obtain the reports.

As regards your Committee's recommendation to send samples of the tobacco to Europe, the Collector replied that he would take the instructions of Government, and, if necessary, communicate with the Chamber further on the subject.

GOVERNMENT OF INDIA'S PROPOSAL TO INTRODUCE A UNIFIED STAMP OF THE VALUE OF ONE ANNA FOR POSTAGE AND REVENUE PURPOSES.

A letter, dated the 8th August last, was received from Government enclosing copy of a letter from the Government of India relative to the proposal to introduce a unified stamp of the value of one anna for postage and revenue purposes, and requesting that Government might be favoured with a definite opinion of the Chamber as to whether they would prefer to leave matters alone or to have a unified

stamp accompanied by a prohibition of defacement of postage stamps.

Your Committee stated in reply that as the convenience of having one stamp instead of two was so apparent, and that the percentage of letters which had their stamps defaced appeared to be so small, they preferred to have a unified stamp accompanied with a prohibition of defacement of postage stamps.

Your Committee presumed that it would still be permissible to deface all other stamps except those of one anna, when two of these were allowed to be used to denote the one anna stamp duty, as appeared to be contemplated in para. 9 of the proposal of the Government of India, dated 30th August 1882.—(*Appendix KK.*)

SHORT LENGTHS AND THE STAMPING OF LOCAL MADE PIECE-GOODS.

In August last, a letter was received from the native Piece-Goods Merchants' Association communicating the following resolution which had been passed by that body :—

“That after the 1st of October, 1883, the local-made goods should bear the stamp of the actual yards they contain with the letters “yds.” after them, and if such local-made goods do not bear the proper stamp, they should not be purchased or sold by any member of this Association.”

Your Committee, in communicating the substance of this letter to the Millowners' Association, reminded them of the correspondence which had passed between the Chamber and them on this subject in December last, when the Association stated that they would gladly co-operate in any steps which were taken to put an end to the practices complained of, and that if the native Piece-Goods Merchants' Association would earnestly and strictly enforce

the proposed measures, there would be little difficulty in effectually putting a stop to them. Your Committee added that the Chamber highly approved of the correct stamping of local-made Piece-Goods, and expressed their belief that the continuance of the present system would eventually injure the trade itself; and they sincerely hoped that the Millowners' Association would co-operate with the native Piece-Goods Merchants' Association, and do all in its power to put an end to it.

From the correspondence which subsequently passed, it appeared that the Millowners' Association had referred the question of the stamping of goods to a Special Sub-Committee, and that, when their report was received, the views of the Association would be communicated to the Piece-Goods Association. Your Committee felt disappointed with the nature of this reply as judging from the way in which the Millowners' Association wrote last year, they had expected that the Association would at once have approved of the action of the Piece-Goods Merchants' Association instead of appointing a Sub-Committee to report. The Millowners' Association threw the onus upon the Piece-Goods dealers last year of having initiated the practice of not stamping goods or stamping them improperly, and expressed their willingness to back them up if they would make an effort to stop it. Now the Millowners' Association appointed a Committee to report instead of giving the promised support. Your Committee urged the Millowners would reconsider the matter and support the efforts which were being made by the native Piece-Goods Merchants' Association to stop the practice complained of.

ALTERATIONS IN THE PRINCE'S DOCK RULES.

The following changes were made in the Prince's Dock rules as per Trustee's Resolution No. 291 of 5th July 1883 :—

The 15 days rule given at page 28 of the Dock Book of

Rates was cancelled, and in lieu of paras. 3 and 4 of Rule 13, the following have been substituted:—

“A vessel lying in Dock without cargo waiting for charter or cargo, and not working, shall nevertheless be charged full dock dues for the time she so lies idle, and must give up her berth, if required, to a working vessel.”

“A vessel, which may have remained in the Dock idle for five days, may be ordered out of Dock by the Superintendent should the space she occupies, whether next to the quay or not, be required.”

“Should a vessel in two days load less than 200 tons at each hatch, she will be considered as lying idle, and will be liable to have to give up her berth to a working vessel.”

“Should a vessel in five days load less than 500 tons at each hatch, she will be considered as lying idle, and will be liable to be ordered out of Dock.”

Your Committee circulated these rules to the members of the Chamber for their opinion, and the result of that reference, which was as follows, was duly communicated to the Trustees, Rules 1 and 2 were approved.

Rule 3.—The Chamber considered that this rule should be altered to the following effect:—Should a vessel in three weather working days load less than 500 tons, she would be considered as lying idle, and would be liable to have to give up her berth to a working vessel.

Rule 4.—The Chamber considered that this rule should be altered as follows:—Should a vessel in eight days load less than 2,000 tons, she would be considered as lying idle, and would be liable to be ordered out of Dock.

The Chamber further considered that in calculating the days, if a steamer was not at her berth by 12 o'clock on the day of entering, Dock dues should not be charged for that day. If a steamer had left her berth not later than noon, Dock dues should not be charged for that day.

At a Meeting of the Trustees held on the 11th December, the amendments proposed by the Chamber were accepted.

G. I. P. RAILWAY RATES FOR THE CARRIAGE OF FULL-PRESSED BALES OF PIECE-GOODS AND YARN.

Representations were made to the Chamber on the subject of these rates. Except in the case of the specially fixed rate, these goods were charged third class rates on the G. I. P. line, while on the B. B. and C. I., the Madras, the E. I., the S. P. and D. and other lines, they were carried as second class goods. Your Committee submitted the desirability of reducing the rates to the same class as the B. B. and C. I. Railway Company charge, the present being a favourable time for doing so, and making a further effort to push Bombay Imports into the up-country markets when ocean freight had fallen so low as 17s. 6d. per ton from Manchester to Bombay, including all charges, and 12s. 6d. per ton from Glasgow. The great number of wagons, moreover, which now leave Bombay empty, permitted of the Railway Company making the experiment without any risk of loss. Your Committee added that in their opinion a great increase in the traffic would be the result; and the Company had now before them a proof of what a reduction in rates could bring about in the enormous increase that had lately been shown in the parcel traffic. The Agent of the Railway Company, in acknowledging the receipt of this letter, stated that the Committee's suggestion would no doubt have the Directors' most careful consideration.

SAILING SHIP BILL OF LADING HOMEWARDS.

Communications were received from the Shipowners' Association, Liverpool, asking the Chamber to use its influence in securing the adoption in Bombay of the Bill of Lading Homewards for the Eastern trade, which had been

agreed upon between a Committee of merchants and ship-owners in London, and which was generally adopted in Calcutta. These communications were circulated among the members of the Chamber for their opinion. A majority of the members was in favour of retaining the form now in use. They considered that the export from Bombay by sailing ships were now so insignificant that no practical benefit could accrue from the adoption of an amended form of Bill of Lading, the more so as it had not been the cause of any dissatisfaction. In Calcutta it was totally different, as the Cape route still attracted a large portion of the trade; and a reply in accordance with these views was sent to the Liverpool Shipowners' Association.—(*Appendix LL.*)

STOCK NOTES.

The Local Government forwarded copies of the Resolution of the Government of India in the Department of Finance and Commerce, dated 10th August last, on the subject of the means to be adopted for encouraging investments in stock notes, and requested that the Chamber might be moved to favour Government with its views on the several points discussed in the Resolution. Your Committee thereupon referred the Resolution to various Banks and to persons of experience in such matters, and in accordance with the opinions which were received, they submitted their report to Government. Your Committee were of opinion that the time had not yet come for the successful introduction of the stock note system. The notes did not supply any real or recognized want existing in India, nor did there seem to be any sign of a demand springing up for them in the present condition of the country. While agriculturists lived in the huts they at

present inhabited, gold and silver ornaments must be much safer securities to hold than Government securities, nor would stock notes answer while we had a tight money market, and the value of the ordinary 4 per cent Government Paper stood below the issue price of stock notes. After submitting their opinion on the various points discussed in the Resolution, they concluded by adding that if it were the intention of Government to persist with the scheme, the following suggestions bearing upon its working might be worthy of consideration, and they believed that their adoption might tend to somewhat lessen the disfavour in which the notes were now held :—

1. They suggested that the notes be made redeemable within the shortest possible term of years compatible with the objects of Government in the introduction of the scheme. Any reduction from the present term of years would, they thought, tend to increase their negotiability.
2. That the interest on the notes be made payable half yearly, and that some arrangement be adopted by which the payment of that interest could be transferred from one circle to another.
3. That the proposal contained in para. 11 of the Resolution be adopted.
4. That the discount of 1 per cent. now given to the licensed vendors be applied instead towards a reduction of the rate at which the notes were issued.
5. That the appearance and size of the notes be improved, and that they bore the signature of a responsible officer of Government.

—(*Appendix MM.*)

PROFESSIONAL COSTS OF SUCCESSFUL PARTIES IN THE SMALL CAUSES COURT IN SUITS UNDER PRESENT EXISTING JURISDICTION.

Representations were made to the Chamber regarding the operation of the present existing rules as to the allowance of these costs. Your Committee considered that the

matter was one which affected the interests of the mercantile community, and they addressed the Registrar of the Court of Small Causes on the subject, and requested that he would do the Chamber the favour of bringing their letter to the notice of their Honors the Judges. Your Committee understood that the existing practice even in suits above Rs. 1,000 was that, though the preparation of a plaint was now necessary, the only professional costs allowed to the plaintiff was an attendance fee in case the defendant appeared and made a defence, and the Committee believed that the operation of this practice was to throw on successful parties costs which should fall on the losers. Your Committee confined their representations to suits above Rs. 1,000, and without seeking to disturb the existing practice as to the remuneration allowed in ordinary cases when the suit was defended, and no special applications to, or attendance in, Courts were requisite, suggested that some modifications of the existing rule should be made in the following cases :—

- (a) When the defendant did not appear or defend the suit.
- (b) When special applications or attendance in Court other than the presentation of the plaint and the hearing were necessary.

The reasons given by the Committee in support of these suggestions and the correspondence on the subject will be found in *Appendix NN*.

APPLICATION OF THE FAMINE INSURANCE FUND AS A FUND WITH WHICH TO RAISE LOANS FOR THE CONSTRUCTION OF RAILWAYS.

The following resolution was passed by the Madras Chamber, and forwarded to this Chamber with a request that it would support the views therein set forth :—

“ That the Madras Chamber of Commerce consider that the present system of only expending the sum annually levied for Famine Insurance is unsatisfactory, as being inade-

quate to the growing wants of the country and dangerously deferring, for so many years, works of such vital importance as preventives against famine. Further that the Chamber consider that for some years, and until the necessary preventive works are well in hand, the Government should borrow for Public Works such sums, the interest on which will not exceed the sum levied as a Famine Insurance. That the views of this Chamber be communicated to the Chambers of Commerce of Bengal and Bombay, and that their aid be requested."

Your Committee in forwarding this resolution to the Government of India, stated that the views therein expressed had, so far as they went, the entire approval of this Chamber, and the Committee hoped that they would commend themselves to His Excellency.

Your Committee, however, went further : they advocated, in addition to the proposal made by the Madras Chamber, the application, in whole or in part, of the two-and-a-half millions sterling, that Government now provide annually, as a fund with which to raise the capital required to construct State Railways on a large and comprehensive scale within the next few years, or to supplement, by way of loan, the capital of the existing Railway Companies, thus securing for the country and the finances of the State at an early period the benefit that cannot fail to follow the judicious extension of new and carefully laid out lines.

Your Committee further suggested that a Special Commission to consider and report on the lines of railway needed and to be undertaken might be appointed by the Government of India.

Your Committee also forwarded copies of the representation, which they made to the Government of India, to the London, Liverpool, and Manchester, Chambers of Commerce, with an expression of their hope that the proposals submitted would receive their cordial support.—
(Appendix OO.)

BANK HOLIDAYS.

The Committee appointed to report on the question of the days to be declared legal holidays in the year 1883 under the negotiable Instruments Act of 1881, sat on the 13th February last, the Chairman representing the Chamber. The holidays which were recommended were sanctioned by Government and published.

Government also approved of the suggestion that the Committees should in future meet in December each year for the purpose of recommending the days to be declared legal holidays for the following year.

ELECTIONS OF PORT TRUSTEES.

Messrs. G. A. Barnett and J. Y. Lang having, on their proceeding to England, resigned office as Trustees, an election by ballot took place on the 21st and 22nd February last to fill their places, and resulted in the election of Mr. James Thorburn, the Chairman, and Mr. F. Forbes Adam, the Deputy Chairman, of the Chamber.

Messrs. Barnett and Lang's term of office, however, would have, in the ordinary course, expired on the 31st March last, and a fresh election being, therefore, necessary, Messrs. J. Thorburn and F. Forbes Adam were, on the 13th March, re-elected by ballot in the usual way.

Mr. F. Forbes Adam obtained four months' leave of absence from 'Trustees' meetings dating from 31st July last; and under section 13, para. 21 of the Port Trust Act, it became the duty of the Chamber to elect some one to act on the Port Trust Board during Mr. Adam's absence. An election by ballot took place on the 12th and 13th August last, and resulted in the election of Mr. L. R. W. Forrest, of the firm of Messrs. Killick, Nixon & Co.

ELECTION OF DEPUTY CHAIRMAN OF THE CHAMBER IN PLACE OF MR. F. FORBES ADAM, RESIGNED.

Following the precedent of previous years, your Committee elected by ballot among themselves Mr. L. R. W. Forrest (of the firm of Messrs. Killick, Nixon & Co.) to be Deputy Chairman in place of Mr. F. Forbes Adam, who had resigned office on his departure for England.

QUOTATIONS OF EXCHANGE, DISCOUNT, GOVERNMENT SECURITIES AND FREIGHT, AND OF THE PRICES OF THE PRINCIPAL ARTICLES OF IMPORT AND EXPORT DURING THE YEAR 1883.

A list of the quotations during the year 1883, compiled from the quotations issued weekly by the Committee, will be found in *Appendix PP*.

RETURNS OF RAINFALL.

These returns showing the weekly rainfall at the stations on the lines have been regularly supplied to the Chamber by the G. I. P. R. and B. B. and C. I. R. Companies during the past season. The thanks of the Chamber are due to the Agents of the Railway Companies for so courteously complying with the wishes of the Chamber in this respect.

CALCUTTA INTERNATIONAL EXHIBITION.

In February last, a communication was received by the Chamber from Government regarding an International Ex-

hibition, to be opened at Calcutta on the 4th of December following, and requesting the Chamber to nominate gentlemen whom they would recommend as members of the Committee to be formed for the purpose of ensuring an adequate representation of the products of this Presidency. In reply to this communication the names of the Chairman and of the members of your Committee were submitted to Government. A notification was subsequently issued by Government in which certain gentlemen, including the members of your Committee, were nominated by Government to act on the Exhibition Committee, and the Chairman of the Chamber was appointed President of it. On 27th July last, a meeting of the Exhibition Committee was held when the Secretary of the Chamber was appointed Honorary Secretary, and in reply to certain enquiries addressed by the Exhibition Committee to Government the following resolution, dated 8th May 1883, was passed :—

RESOLUTION.—Mr. Thorburn should be informed that the Governor in Council trusts that the Committee, of which he is President, will exert its best efforts to secure the full and worthy representation of the various products and manufactures of this Presidency at the Exhibition to be held at Calcutta in December next. Its duties must, of course, be to some extent merely honorary, but if its members will employ their great local influence in promoting the interests and success of the Exhibition, it will be in their power to render very valuable assistance.

2. A total grant of Rs. 10,000, has been allowed for this Presidency, and of this sum Rs. 5,000 have been given by this Government. The whole of this amount has been entrusted for expenditure to Mr. Griffiths, who will obtain with the money articles of art-ware, jewelry, fabrics, and other articles of adornment or luxury manufactured in the Bombay Presidency for display at the Calcutta Exhibition. Dr. Macdonald will arrange, in communication with the Collectors, for the formation of a collection of complete set of agricultural implements and water-lifts, or models of those articles.

3. It is not intended that Mr. Griffiths and Dr. Macdonald should work under the orders of the Committee, but those gentlemen will be

happy to work in conjunction with the Committee and to co-operate with the Committee in securing the desired result.

A subscription was thereupon set on foot to raise money for the purpose of appointing agents and defraying all expenses that might be incurred in sending exhibits; and Government were asked to head the list by placing a few thousand rupees at the disposal of the Committee. Government subscribed Rs. 1,000. The total subscriptions amounted to Rs. 9,145. The Exhibition Committee then proceeded to collect such articles as were wanted for the Exhibition; they sent the notification of the Government of Bengal, showing the nature of the articles which were more particularly wanted, and the conditions under which they might be exhibited, the classifications of the exhibits of local art-ware, jewellery, fabrics, &c., and the terms and conditions under which the two Railway Companies were prepared to carry goods for the Exhibition, to all the members of the general Committee, to the Commissioners of Divisions and Collectors in the Presidency, and to every person they could think of who would be likely to co-operate with the Committee in procuring and sending to them for Exhibition, on loan, or for sale, such a collection of articles as came within the advertisement or classification.

The general instructions issued for the guidance of local Committees were that they need only give their attention to the collection of exhibits of local art-ware, jewellery, fabrics, furniture and other articles of adornment or luxury. The collection of raw products and manufactures therefrom, as well as of agricultural machines and implements had been undertaken by the Revenue and Agricultural Department of the Government of India. The Committee, therefore, felt that it was not intended that they should in any way interfere as regarded the collection of these articles, which

the Government of India had taken into their own hands. From the enquiries, however, which had been addressed to the Committee, it appeared that the Collectors of the Presidency had not, down to the middle of September, received any instructions as to the collection of samples of raw products. As the Committee considered it to be of the highest importance to India that specimens of every variety of Indian cotton and of the various kinds of wheat, linseed, teelseed, and other products, should be exhibited, they requested information as to what arrangements had been made for the exhibition of these articles, and, if any arrangement had been made, whether the Bombay Committee were expected to forward the specimens; and in the latter case, what space would be allotted for them, and if it were necessary that the specimens should be accompanied with show-cases. A reply was received to this communication stating that it was a very welcome one; that the present arrangements were unsatisfactory, and that space for a complete collection was available and would be granted. The Committee also addressed a similar letter to the Exhibition authorities enquiring what arrangement had been made for the exhibition of specimens of the various kinds of cloths and yarns manufactured by the Bombay Cotton Spinning and Weaving Mills, classified under the heading of "Raw Products" as from the enquiries made by the Committee no communications had been received by any of the Mills from the Exhibition authorities. In reply to this letter, the Committee were again informed that they were quite right in thinking that the duties of the Bombay Committee were entirely to organize the art-ware collection, and that the Bombay Mills ought to have applied on their own account for space in the Great Exhibition in the same manner as any other exhibitor had to do. The necessary space was, however, on the urgent representa-

tions of the Committee, subsequently allotted, and a large and varied collection of raw products and of the manufactures of the Bombay Mills was in due time forwarded to the Exhibition.

As the labours of the Committee were drawing towards a close, Mr. Arthur Crawford, a member of the General Committee only, overlooking the limited nature of the duties assigned by Government to the Committee, thought proper to make an unfounded charge of neglect in forwarding its objects against the President. Mr. Thorburn, after replying to those charges in a manner entirely satisfactory to the Committee of this Chamber, felt it, however, incumbent upon him to resign office as a protest on his part against the criticism directed against him by a Government official of Mr. Crawford's standing.

MISCELLANEOUS.

Numerous references have been made to your Committee during the period under review on points connected with the mercantile and shipping interests of the Port which were considered and disposed of in the usual manner.

The balance at the credit of the Chamber on the 30th November 1883 was Rs. 52,928-8, against Rs. 44,421-1 on the 30th November 1881, being an increase in the twelve months of Rs. 8,507-7.

The Measurement Fee Account shows a credit balance, in the twelve months, of Rs. 8,186-11-8. The fee for measuring bales of cotton, wool, and hemp, continued throughout the year at 3 pies per bale.

STATEMENT showing the total Measurement of Bales and Miscellaneous Packages, with Receipts, Expenditure, &c.

Year ending	No. of Bales Measured.	Receipts.	Expenditure.	Surplus Receipts	Excess of Expenditure.
		Rs.	Rs.	Rs.	Rs.
From 18th May 1870 to 30th November 1872	Not recorded	52,215	36,315	15,900	...
From 1st December 1872 to 30th November 1873...	1,086,577	16,995	15,291	1,704	...
Year ending 30th November 1874	1,402,379	21,707	18,986	2,721	...
Do. 30th Nov. 1875	1,474,470	23,039	22,009	1,030	...
Do. 30th Nov. 1876	1,240,034	19,375	22,355	...	2,980
Do. 30th Nov. 1877	1,101,318	18,324	21,561	...	3,237
Do. 30th Nov. 1878	1,040,961	20,837	23,287	...	2,459
Do. 30th Nov. 1879	887,100	28,808	20,140	8,668	...
Do. 30th Nov. 1880	1,163,545	33,219	20,084	13,135	...
Do. 30th Nov. 1881	1,313,592	25,177	24,029	1,147	...
Do. 30th Nov. 1882	1,892,796	33,225	24,757	8,468	...
Do. 30th Nov. 1883	1,852,047	33,792	25,605	8,186	...

STATEMENT showing the number of Miscellaneous Packages only, with Receipts therefrom measured during the last six years.

Period.	Number of Packages.	Receipts.		
		Rs.	a.	p.
1st Dec. 1877 to 30th Nov. 1878	89,327	2,791	7	6
1st „ 1878 to „ 1879	1,55,886	7,980	2	0
1st „ 1879 to „ 1880	1,65,182	10,317	10	0
1st „ 1880 to „ 1881	1,08,271	6,766	15	0
1st „ 1881 to „ 1882	1,00,106	6,256	10	0
1st „ 1882 to „ 1883	1,15,909	7,244	5	0

Your Committee have now only to tender their thanks to the members of the Chamber for their ready attention to all matters on which they have had occasion to consult them; and to express their acknowledgments to His Excellency the Governor-General of India in Council, and to His Excellency the Governor of Bombay in Council for the courtesy and attention with which their representations have on all occasions been received.

APPENDIX A.

FUNDS OF THE BOMBAY CHAMBER OF COMMERCE.—From 1st December 1882 to 30th November, 1883.

DISBURSEMENTS.		Amount.		RECEIPTS.		Amount.	
	Rs.	A.	P.		Rs.	A.	P.
Rent	Rs. 3,377	8	0	Balance at the Credit of the Chamber, on 30th November, 1882, as shown in the last year's account	11,874	3	1
Less amount received from Mr. Gordon up to 30th November 1883 .. Rs. 700				Subscriptions*	9,608	9	5
Milowners' Association up to 31st Oct. 1883 .. Rs. 600	1,420	0	0	Publications	2,460	4	0
Printing—				Realized by sale of Daily and Weekly Trade Returns and Manifests	2,400	0	0
Miscellaneous Papers	Rs. 1,258	14	0	Received at Cotton Measurement Fee Account for Head Office Charges in connection with the Measurement Scheme	1,100	0	0
Annual Report	1,501	8	0	Do. Milowners' Association's contribution to Statistical Department up to 31st October 1883	1,121	10	6
Advertisements				Do. Interest on Fixed Deposits	473	1	7
Newspapers and Books				Do. Miscellaneous receipts for copies of Tonnage Scale, old records, Cane and Coir matting in the Chambers' old Office room, &c.	15	0	0
Office Salaries, Telegrams, Petty Charges, &c.	9,663	2	3	Do. on account of Arbitration Fee in one case	29,858	£2	9
Stationery	161	15	6	Do. by profit in the Measurement Fee Account for the year ending 30th November 1883	8,186	11	8
Postage and Receipt Stamps	194	11	6				
Daily & Weekly Trade Returns, Manifests, & other Statistics .. Rs. 4,380	6	4		Total	81,000	9	5
Printing	6,246	10	8				
Milowners' Association Establishment	11,337	1	0				
Municipal Rates and Taxes	864	0	0				
Auditor's Fee	231	0	0				
Paid for renewing the oil painting in the Chamber's rooms	100	0	0				
Paid Telephone Company, Ltd., for 1883-84	460	0	0				
Balance invested as follows:—	390	0	0				
Fixed Deposit Receipts bearing interest at 4 and 5 per cent. per annum:—							
Hongkong & Shanghai Banking Corporation @ 5 per cent.	Rs. 14,000	0	0				
Do. @ 5 "	10,000	0	0				
Do. @ 4 "	10,000	0	0				
Oriental Bank Corporation	13,000	0	0				
Chartered Bank of India, Australia & China at 5 per cent. ..	4,000	0	0				
Cash in the Bank of Bombay	51,000	0	0				
Cash in hand	1,828	8	0				
Total	81,000	9	5				

* Not including Subscriptions and Publications for November 1883, which amounted to Rs. 1,757-8-0.

I have examined the above statement of accounts with the abstracts, vouchers, and statement books of the Chamber; and books of the Measurement F. & E. account. Everything is correct and in order. The balance of Cash at Bank of Bombay on 30th November is correctly shown; also the balance of cash in hand. The Deposit receipts of the Hongkong and Shanghai Bank, the Oriental Bank, and the Chartered Bank of India, Australia and China, have been shown to me and are in order.

(sd.) N. S. SYMONS, Auditor.

Bombay, 13th December, 1883.



APPENDIX B.

GRAIN RATES FROM AGRA AND DELHI TO BOMBAY BY THE B. B. & C. I., AND THE RAJPUTANA-MALWA STATE RAILWAY.

BOMBAY CHAMBER OF COMMERCE, 19th *February*, 1883.

To the SECRETARY to GOVERNMENT, Public Works Department (Railways), Bombay.

SIR,—With reference to my letter of the 14th October last, regarding the grain rates from Delhi to Bombay, *via* the Rajputana State Railway, I am directed by the Committee of the Chamber of Commerce to remind His Excellency the Governor in Council that no reply, although anxiously awaited for months past by the mercantile community, has yet been given by the Government of India to the representations made by His Excellency on this subject on the 22nd of July last.

His Excellency on that occasion was pleased to express his concurrence generally with the views of the Chamber, observing that he must continue to support the principle of equal mileage rates, which had the great merit of simplicity, and would keep the subject free of constantly recurring discussion. It is unnecessary at this time to again trouble His Excellency with a recapitulation of the arguments adduced in support of this principle, which was, it was understood by the Chamber, accepted by the Government of India, in their letter of the 26th September 1881, although the views therein expressed were considerably modified by that Government on the 19th October following. Had the principle been carried into practical effect, it would have been regarded with satisfaction by the whole mercantile community of Bombay.

The main reason assigned by the Government of India for their departure from the principle of equalization of rates was the difference in the cost of carriage between the

two lines concerned, and in this cost of carriage the principal item was coal.

His Excellency, however, has clearly shown that the difference in the cost of fuel does not warrant the present differential rates in favour of Calcutta, and that but a small proportion of the rate is absorbed by coal. This fact, which it is of the utmost importance to note as being of the very essence of the whole question, is proved by the comparative table of figures given in para. 13 of His Excellency's letter to the Government of India of the 22nd July last, which runs as follows :—

The existing rates are—

Carriage of 1 maund—				a.	p.
Delhi to Bombay	...	...	...	13	5
Delhi to Calcutta	...	...	...	11	2
Difference				2	3

Expenditure of coal for 1 maund taken from the figures given by the Government of India—

	a.
Delhi to Bombay	972
Delhi to Calcutta	166
Difference	806

The difference, therefore, between the expenditure of coal on one maund from Delhi to Bombay, *via* the Rajputana Line, is '806 of an anna greater than from Delhi to Calcutta, while the difference in the rate charged for the carriage of one maund from Delhi to Bombay is 2·3 annas greater than from Delhi to Calcutta, being a differential rate of nearly 1½ annas per maund in favour of Calcutta, after allowing for the difference in expenditure of fuel between the two routes.

The Committee are still of opinion that the principle of equalization of rates is sound, and that, by its adoption, many of the difficulties which now surround the question would be removed. As, however, the Government of India is apparently unwilling to act upon that principle, and an early settlement of the question is, in the interest of the trade, most desirable, the Committee would consider a differential rate between Delhi and the two ports of one anna per maund in favour of Calcutta admissible, it being understood that, at whatever rate per maund the carriage of grain from Delhi to Calcutta may be fixed, the rate from Delhi to Bombay, *via* Rajputana, shall be fixed at one anna

per maund higher. This differential rate would more than cover the difference in the cost of fuel on the two lines, and would remove the specific objection taken by the Government of India to the principle of the equalization of rates. And looking to the great disadvantages under which India labours in its competition with the wheat producing countries of Europe and America, and to the difficulty of moving stocks in India when the prices in Europe are low, the Committee trust that if the proposal is agreed to, the rates from Delhi to the ports will be fixed at the lowest possible figures.

The Agent of the B. B. & C. I. Railway Company is willing that the East Indian rate should be fixed at one anna per maund below the Bombay rate; and it appears to the Committee that this proposal, if adopted, while approximately equalizing the cost of coal on the two lines, would, next to that of equal mileage rates, be the best solution of this complicated question.

The Committee desire also to take this opportunity to suggest that many advantages would accrue to the public if the management of the Rajputana State Railway were made over to the B. B. & C. I. Railway Company. On the occasion of the State visit of His Excellency the Viceroy to Bombay in November 1880, the Chamber, in their address, submitted this, among other important questions, which His Excellency was good enough to say would receive his consideration. The Chamber then stated that the State Railways would, if this policy were adopted, be conducted with much greater economy, and the difficulties which have arisen in connection with the question of the through grain rates from Delhi to Bombay, *via* Rajputana, furnish an apt illustration of the convenience which would result from an unified management of the two lines. Such an arrangement would enable the settlement of all questions of rates by each route to be decided by one management only, and the Railways concerned would more directly than at present be responsible for the effect which might be produced at the different ports by the rates imposed. It would secure many advantages, and, the Committee believe that the arrangement, whilst benefiting trade, would be acceptable to the general public; and they respectfully recommend it to the consideration of the Government of India.

The Committee, in conclusion, desire respectfully to ex-

press their hope that these important questions may receive early consideration on the basis of the proposals now submitted.—I have, &c.,

JAMES THORBURN, Chairman.
J. GORDON, Secretary.

No. 344 OF 1883.

PUBLIC WORKS DEPARTMENT (RAILWAY),
BOMBAY CASTLE, *2nd March*, 1883.

To the SECRETARY to the CHAMBER of COMMERCE, Bombay.

SIR,—I am directed to acknowledge the receipt of your letter, dated 19th February, 1883, regarding the grain rates from Delhi to Bombay, and to forward copy of a Resolution passed by His Excellency the Governor in Council.—I have, &c.,

R. T. FRERE, Major, R.E.,
Under-Secretary to Government.

No. 344 OF 1883.

P. W. DEPARTMENT (RAILWAY),
BOMBAY CASTLE, *2nd March*, 1883.

Letter from the Chamber of Commerce, Bombay, dated 19th February, 1883:—

“With reference to my letter of the 14th October last, regarding the grain rates from Delhi to Bombay, *via* the Rajputana State Railway, I am directed by the Committee of the Chamber of Commerce to remind His Excellency the Governor in Council that no reply, although anxiously awaited for months past by the mercantile community, has yet been given by the Government of India to the representations made by His Excellency on this subject on the 22nd of July last.

“His Excellency on that occasion was pleased to express his concurrence generally with the views of the Chamber, observing that he must continue to support the principle of equal mileage rates, which had the great merit of simplicity, and would keep the subject free of constantly recurring discussion. It is unnecessary at this time to again trouble His Excellency with a recapitulation of the arguments adduced in support of this principle, which was, it was understood by the Chamber, accepted by the Government of India, in their letter of the 26th September 1881, although the views therein expressed were considerably modified by the Government on the 19th October following. Had the principle been carried into practical

effect, it would have been regarded with satisfaction by the whole mercantile community of Bombay.

"The main reason assigned by the Government of India for their departure from the principle of equalization of rates was the difference in the cost of carriage between the two lines concerned, and in this cost of carriage the principal item was coal.

"His Excellency, however, has clearly shown that the difference in the cost of fuel does not warrant the present differential rates in favour of Calcutta, and that but a small proportion of the rate is absorbed by coal. This fact, which it is of the utmost importance to note as being of the very essence of the whole question, is proved by the comparative table of figures given in para. 13 of His Excellency's letter to the Government of India of the 22nd July last, which runs as follows :—

The existing rates are—

Carriage of 1 maund—				a.	p.
Delhi to Bombay	...	...	...	13	5
Delhi to Calcutta	...	...	...	11	2
Difference...				2	3

Expenditure of coal for 1 maund taken from the figures given by the Government of India—

				a.
Delhi to Bombay	...	...	...	972
Delhi to Calcutta	...	...	...	166
Difference...				806

The difference, therefore, between the expenditure of coal on one maund from Delhi to Bombay, *via* the Rajputana Line, is '806 of an anna greater than from Delhi to Calcutta, while the difference in the rate charged for the carriage of one maund from Delhi to Bombay is 2'3 annas greater than from Delhi to Calcutta, being a differential rate of nearly 1½ annas per maund in favour of Calcutta, after allowing for the difference in expenditure of fuel between the two routes.

"The Committee are still of opinion that the principle of equalization of rates is sound, and that, by its adoption, many of the difficulties which now surround the question would be removed. As, however, the Government of India is apparently unwilling to act upon that principle, and an early settlement of the question is, in the interest of the trade, most desirable, the Committee would consider a differential rate between Delhi and the two ports of one anna per maund in favour of Calcutta admissible, it being understood that, at whatever rate per maund the carriage of grain from Delhi to Calcutta may be fixed, the rate from Delhi to Bombay, *via* Rajputana, shall be fixed at one anna per maund higher. This differential rate would more than cover the difference in the cost of fuel on the two lines, and would remove the specific objection taken by the Government of India to the principle of the equalization of rates. And looking to the great disadvantages under which India labours in its competition with the wheat producing countries of Europe and America, and to the difficulty of moving stocks in India when the prices in Europe are low, the Committee trust that, if the proposal is agreed to, the

rates from Delhi to the ports will be fixed at the lowest possible figures.

"The Agent of the Bombay, Baroda and Central India Railway Company is willing that the East Indian rate should be fixed at one anna per maund below the Bombay rate; and it appears to the Committee that this proposal, if adopted, while approximately equalizing the cost of coal on the two lines, would, next to that of equal mileage rates, be the best solution of this complicated question.

"The Committee desire also to take this opportunity to suggest that many advantages would accrue to the public if the management of the Rajputana State Railway were made over to the Bombay, Baroda and Central India Railway Company. On the occasion of the State visit of His Excellency the Viceroy to Bombay in November 1880, the Chamber, in their address, submitted this, among other important questions, which His Excellency was good enough to say would receive his consideration. The Chamber then stated that the State Railways would, if this policy were adopted, be conducted with much greater economy, and the difficulties which have arisen in connection with the question of the through grain rates from Delhi to Bombay, *via* Rajputana, furnish an apt illustration of the convenience which would result from an unified management of the two lines. Such an arrangement would enable the settlement of all questions of rates by each route to be decided by one management only, and the Railways concerned would more directly than at present be responsible for the effect which might be produced at the different ports by the rates imposed. It would secure many advantages, and the Committee believe that the arrangement, whilst benefiting trade, would be acceptable to the general public; and they respectfully recommend it to the consideration of the Government of India.

"The Committee, in conclusion, desire respectfully to express their hope that these important questions may receive early consideration on the basis of the proposals now submitted."

RESOLUTION.—The following letter to be addressed to the Government of India :—

With reference to former correspondence on the subject of through rates for grain, &c., from Delhi to Bombay, I am directed to submit letter from the Chamber of Commerce, Bombay, dated 19th February, and in so doing to repeat in brief terms the opinions entertained by the Bombay Government as to the general principles that should govern rates on competitive lines. These are :—

- 1.—That when two lines compete for the same traffic, the line which can carry at least cost should fix the through rate.
- 2.—That if the more expensive line is to share in the traffic at all, it must be content with a smaller profit than the other.
- 3.—That, similarly, when through traffic passes over two or more lines, the more expensive cannot reasonably expect the

same profit on their share of the through rate as the cheaper line or lines.

- 4.—That no line can reasonably be expected by the public to accept traffic at rates which involve a loss in working.
- 5.—That while the abstract right of the line which can carry at least cost to reduce rates to a point at which the more expensive line cannot afford to carry, may be admitted ; the *expediency* of their sacrificing legitimate profits in order to secure the whole of the traffic is altogether another question ; and that where two State lines are concerned, the State, as owner of both, may properly interfere to prevent such competition.

2. The Governor in Council, I am to state, would wish to see these principles applied to the question of through rates from Delhi to Bombay and Calcutta, respectively. He is in accord with the Government of India in deprecating any premature reduction of rates on the Rajputana Railway, but considers that the through rates for agricultural produce to the place of export should, with a view to encourage production and the development of the country, be fixed at the lowest rate that will yield a profit, and has no doubt that the result of reductions in rates, gradually and judiciously made to correspond with the increasing working capacity of that line, will bring an increase in profits due to increased business.

3. He thinks the proposal of the Chamber of Commerce—that the through rate for grain Delhi to Bombay should be fixed at one anna per maund above the rate from Delhi to Calcutta, as fixed by the East Indian Railway Company with the sanction of the Government of India—is one which might be accepted as a satisfactory solution of a long-standing dispute, not because he wishes to argue that the whole difference in working cost is represented by this amount, or that the Rajputana will make the same profit out of rates thus regulated as the East Indian, but because it gives the latter route an advantage which the Government of India consider may be fairly claimed.

4. Lastly, he would again venture to advise that the division of the through rate between the Rajputana and Bombay, Baroda and Central India Railways be made according to mileage, as he thinks the principle of “equal profits” cannot possibly be maintained.

5. The Governor in Council would appeal to the principle of encouragement to the industry of the country by carrying at the lowest rate compatible with profit a low-priced article which can only find a market in competition with the produce of other countries if assisted to the utmost by facilities of communication. The marvellous development of the growth of food grains in North America is entirely owing to the liberality of the State Governments in their treatment of Railway Companies, so that these latter can afford to carry at rates surprisingly low : and yet, as shown by a recent Parliamentary paper, there is soon reached a distance beyond which grain cannot be carried, even on broad-gauge and level lines, at a paying rate. To deny the wheat of the North-West all the advantage which the shortest route to its market can give it, is simply to impose an export duty

for the benefit of one of the State Railways, and greatly to hinder a staple industry.

6. The Chamber in their letter advocate the transfer of the management of the Rajputana Railway to the Bombay, Baroda and Central India Railway Company. The Governor in Council, however, believes the management of the Rajputana Railway to be both economical and efficient, and if the through rates are regulated in accordance with the principles laid down above, he sees no reason why the present arrangement should fail to give satisfaction to the public.

P.S.—Since the above letter was written, your telegram of this

day's date, marginally quoted, has been received. The proposals contained in it have been accepted by the Agent, Bombay, Baroda and Central India Railway Company, and will, doubtless, be received with the greatest satisfaction by the Chamber of Commerce as a settlement of the question.

2. The following telegrams to be sent,

To Calcutta—Works :—

Your telegram of 2nd. Agent, Baroda Railway, accepts proposals Delhi through rates, and will issue notice accordingly. Manager Rajputana advised.

To Manager, Rajputana State Railway :—

India telegraphs as follows, dated 2nd instant :—Telegram begins : "Your letter 1476 of 22nd July last. Reply issues to-day authorising through rates Delhi to Bombay, eleven annas for wheat, eleven annas six pies for other grains and seeds of same class : other stations proportionately. Rajputana 'A' class sliding scale being applied, and proceed divided according to mileage : Sabarmati charge not to be deducted from gross receipts before division. If Agent, Baroda Railway, agrees, please cause month's notice to be given at once, and inform Manager, Rajputana Railway." Telegram ends. Agent Baroda accepts proposals. Will issue notice accordingly in communication with you.

3. The Chamber of Commerce to be furnished with copy of this Resolution with reference to their letter dated 19th February 1883.

4. Copies should also be communicated to the Consulting Engineer for Railways, and the Agent, Bombay, Baroda and Central India Railway Company.

H. F. HANCOCK, Colonel, R.E.,
Joint-Secretary to Government.

No. 399 of 1883.

PUBLIC WORKS DEPARTMENT (RAILWAY),
BOMBAY CASTLE, 13th March, 1883.

To the SECRETARY CHAMBER of COMMERCE, Bombay.

SIR,—In continuation of my letter No. 344, dated 2nd March last, I am directed to forward copy of a letter from the Government of India, No. 162 R. T., dated 2nd idem, regarding the grain rates from Delhi to Bombay.—I have, &c.,

R. T. FRERE, Major, R.E.,
Under-Secretary to Government.

No. 162 R. T.

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
RAILWAY TRAFFIC.

FORT WILLIAM, 2nd March, 1883.

To the SECRETARY to the GOVERNMENT of BOMBAY, Public Works Department.

SIR,—I am directed to acknowledge the receipt of your

No. 1476, dated 22nd July 1882.

No. 2056, dated 20th October 1882.

letters specified in the margin, communicating the views of the Government

of Bombay, and forwarding communications from the Bombay Chamber of Commerce and the Agent, Bombay, Baroda and Central India Railway, on the subject of through rates for grain from Delhi and Agra to Calcutta and Bombay.

2. As the questions involved in a due consideration of this subject are of not merely individual, but general application, His Excellency the Governor General in Council considers it necessary to take the present opportunity of explaining fully the principles according to which, in the opinion of the Government of India, railway rates and fares should be regulated. This course is the more desirable in view of the probable extension of railway enterprise in India with a minimum of State support and control, and of the need of some assurance to the promoters and proprietary of such private lines in respect of the attitude which will be assumed by the State towards them.

3. As regards rates in general, the fundamental aim of the management of a Railway obviously should be to at-

tract the maximum quantity of traffic the line can carry, at the best rates obtainable. These rates must be determined in each case. All rates will be in one sense special, though they may be capable of classification into groups, and each rate will depend on what the article will bear, what quantity of it is obtainable, and what is the approximate cost of hauling it. In other words, as correctly remarked in your letter under reply "the cost of carriage is one of the limits within which rates may vary, the tax which the trade will bear being the other." But, in determining any particular rate, the whole circumstances of the traffic must be considered, the empty as well as the full running, the intermissions according to season, if any, and the competition, if any, of other modes of conveyance. Hence, though every rate must contribute to the general remunerativeness of the line as a whole, more profit may accrue out of one rate than another, a particular rate may be remunerative only indirectly, by filling rolling stock which would otherwise inevitably run empty in one direction, or, in other words, it may yield less than the average cost of carrying a unit of goods.

4. Two points of importance in working on such principles may here be incidentally mentioned. The theory of equal mileage rates, whether compulsory or not, has been repeatedly condemned by competent authorities—by the Royal Commission of 1867, the Joint Committee of 1872, and Mr. Ashley's Committee of 1881—while telescopic rates, that is, rates varying inversely as the distance, are recognized as legitimate in all cases where the favored traffic would be lost without such rates, and as financially feasible, owing to the lower proportionate cost of the longer lead.

5. Under conditions perfectly simple, where one railway alone commands a province or given area, the proprietors obtain, under management such as has been described, the full advantage of their monopoly, the full possible amount of profit on their capital, except in so far as the State may interpose in the interest of the public, as, for instance, for the purpose of fixing maxima fares and rates for the conveyance of the poorer classes of passengers and of indispensable articles, such as salt, coal and food grains. The public and trade, on the other hand, not unfrequently suffer severely in the cost to them of railway accommoda-

tion, even where rates may not be so excessive as to check materially, or to extinguish, its profitable use. But where there is no monopoly, and competition of other railways or modes of transit has to be faced, the basis on which calculation of rates must proceed is materially changed. Capital cost of construction, gradients, cost of fuel and carrying capacity may, indeed, be borne in mind as elements affecting the profit earned, but the rates must eventually be governed, not by any arbitrary standard of profit to which it is thought fair to attain, but by the necessity of attracting traffic to the line. The railway which has, for whatever reason, cost most to construct, or which has the steepest gradients, or the dearest fuel, or other natural disadvantage in comparison with its rival, will necessarily go to the wall, and suffer in dividend—possibly so far as to do little more than cover its working expenses. From this follows, moreover, that in any case when through traffic passes over more than one railway, and the different administrations do not mutually agree upon any other method, the receipts from such traffic should be divided according to mileage run.

6. It may next be considered whether these principles of action in cases where competition exists are affected by the State being either the proprietor, or vested with a certain interest in and control over one or more of the conflicting railways. Clearly, they are not. The State ought not, and often could not, interfere to redress the inequalities of nature, of construction, or of management, and to put all upon a theoretically fair and equal footing. It cannot legitimately make a common purse among its railways in order to support one at the expense of another, or still less, to drive an independent competitor from the field. Rival routes must be left alone, each to get the highest traffic it can upon the principles above set forth. The net result will be the greatest aggregate of traffic upon all combined which is consistent with a profit, the maximum of accommodation to traders and the public, and of gain to both producers and consumers, and the highest possible development of the resources of the country. Under only one class of circumstances will the State be justified in using such influence as it may in any case possess, namely, where competitive rates are unreasonably or unnecessarily lowered through either ignorance, recklessness, or idle

rivalry, on the one hand, or the indifference which the security of a Government guarantee may induce, on the other.

7. From the preceding observations it will have been perceived that His Excellency the Governor General in Council, while recognizing the soundness of many of the views which have been put forward by His Excellency the Governor of Bombay in Council, by the Chamber of Commerce, or the Agent, Bombay, Baroda and Central India Railway, is unable to meet the wish that the rate for grain traffic by the Calcutta route should be arbitrarily fixed by Government at the same amount as the rate *via* Rajputana, or at a lower amount proportioned so as to equalise the cost of coal. His Excellency in Council prefers to adopt the alternative recommendation of the Bombay Government in your letter under reply—"That a minimum rate should be fixed for the Bombay route, without reference to the East Indian charge."

8. What the rate on the Rajputana Railway ought to

For grain booked through.	Baroda Railway charge.	Rajputana Railway charge.	Total.
	As. p.	As. p.	As. p.
From Delhi	4 6	9 0	13 6
„ Agra.....	4 11	8 6	13 5
„ Bandiqui..	4 10	8 2	13 0
„ Ajmere ...	6 0	6 7	12 7
„ Chitrasani	6 0	2 10	9 4

be, in accordance with the general principles enunciated, may next be examined. The rates per maund actually in force are those shown marginally. His Excellency the Governor General considers that there is reason to believe that a rate considerably lower

would more than cover the outlay incurred in the particular case, and might possibly even yield a greater sum as net profit, through the larger dealings which may be expected. A reduction would thus be desirable, on sound commercial principles, irrespective of what might be the article concerned. But in this case strong additional reasons for such a course may be derived from the fact that the reduction will be in favour of grain for export, chiefly wheat. His Excellency the Governor General in Council is strongly impressed with the ability of India to furnish a much larger share than she now does of the vast quantity of this commodity required in Europe, and is determined that no legi-

timate efforts on the part of the State shall be wanting for the purpose of securing it. Independently of the direct gains from an increased aggregate of paying traffic, which have been mentioned in para. 6, the very important effects of an increase of exports upon the rate of exchange, and the reflex chain of advantages indirectly produced thereby, cannot be overlooked.

9. His Excellency the Governor General in Council is accordingly prepared to concur in a reduction of the through-rates between Delhi and Bombay to 11 annas for wheat and $11\frac{1}{2}$ annas for other grains and seeds of the same class, other stations being treated proportionally, the Rajputana A class scale being applied, and the proceeds divided according to mileage. This rate is apportioned between the Rajputana and Baroda Railways on the mileage principle, and it will be shaded off, for stations south of those named, on the principle, already applied, of giving greater favour to the longer leads. The opportunity may also be taken to abolish the restriction of the minimum load to which the through rates will apply. If the Agent, Bombay, Baroda, and Central India Railway, consents to these reductions, the necessary month's notice may be issued at once and the Manager, Rajputana-Malwa Railway, informed by telegraph accordingly. Finally, in full concurrence with the representation contained in the letter, dated 12th April 1882, from the Secretary to the Bombay Chamber of Commerce, as to the prejudicial effects of frequent changes and uncertainty, it seems desirable that the rates should be maintained until the 31st March 1884, any alteration which experience may show to be necessary after that date being notified to the public not less than two months previously.

10. If the Agent of the East Indian Railway considers that any change in the existing rates for grain or coal, or as to the restriction of minimum loads would now be desirable, His Excellency the Governor General in Council will be prepared to give full consideration to any proposals he may submit.

11. While thus disposing of the particular case under reference, His Excellency the Governor General in Council desires to take this opportunity of making publicly known the principles upon which the Government of India will be guided generally in dealing with railway rates. Subject to

interposition such as has been described in para. 6, His Excellency in Council considers that Agents and Managers of Railways may, subject to general rules which will be communicated hereafter, be left as free as possible to fix, upon these principles, such rates as may seem most advantageous for their respective lines. To adopt the words of an able and exhaustive essay on the subject by Mr. T. H. Farrer—

“ They may not be able to say exactly what is the cost and profit of each particular transaction ; what is its share in the Capital account or in the expense of working ; just as a manufacturer cannot say what is the exact cost of each parcel of goods he sends out. But they know generally whether a particular traffic brings them in a profit or not, and if it does not, they soon find out the truth, and cease to carry it.”—*The Fortnightly Review*, August, 1882.

All Agents and Managers will now be invited to examine carefully their rates with the view of seeing how far they may be capable of modification, and especially, whether the rates on grain and other leading articles of export might not be reduced with advantage. The coaching traffic, and especially the fares for 3rd class passengers, might also be re-considered in the same sense.

12. In conclusion, I am to draw general attention to the fact that every expansion of the export trade will bring to bear a heavier strain upon the facilities for handling, warehousing, removing, and shipping produce at the railway stations and ports. These facilities are believed to be even now in many cases inadequate, and their improvement will, His Excellency the Governor General in Council trusts, engage the serious attention of the several local authorities at an early date.—I have, &c.,

W. S. TREVOR, Colonel, R.E., Secretary.

APPENDIX C.

GRAIN RATES OF THE G. I. P. RAILWAY COMPANY.

No. 110 of 1883.

BOMBAY CHAMBER OF COMMERCE, *19th April, 1883.*

To the AGENT of the G. I. P. RAILWAY COMPANY.

SIR,—I am directed by the Committee of the Chamber of Commerce to request the favour of your attention to the Chamber's letters, dated respectively the 9th June and 12th July last, regarding the reduction of the rates for the carriage of grain by your Railway. From your demi-official reply No. 191, dated the 2nd August following, the Committee understood that your were to refer these letters to your Board of Directors for their instructions, but no communication on the subject has since then been received from the Company.

Since that correspondence took place the falling off in the arrivals of wheat at Bombay by the G. I. P. Railway has continued, the total quantity during the 9 months ending 31st March 1883 being 4,080,208 cwts., or an average of 453,356 cwts. per month, against 7,537,271 cwts., or an average of 837,474 cwts. per month, in the nine corresponding months ending 31st March 1882. The depression, or low level of prices, which has, throughout this period, existed more or less in the home markets in consequence of the good harvest last year in Europe and America, has resulted in a great curtailment of business, and the Indian cultivators have again largely resorted to storing their grain, complaining that the prices offered are so low that they cannot afford to pay the high charges for carriage to the port of Bombay. Recent experience seems to have established the fact that the grain rates of the G. I. P. Railway are absolutely in themselves greater than these articles of export can bear in ordinary times, and that it is only when an occasional, exceptional, demand springs up, in consequence of scarcity or bad harvests in Europe and America, that supplies are brought in quantity to the port for shipment. The extended cultivation of wheat in the Central Provinces principally owed its origin to the demand which arose on account of the famine in Southern India, and it seems to the Committee to be not improbable that if the present G. I. P. rates are maintained, they

can only lead to a serious contraction of the acreage under wheat cultivation, in the provinces served by the Company.

The Committee request the favour of your attention to the following comparative tables of the grain rates from stations on the G. I. P. Railway to Bombay, with the through rates to Bombay *via* Delhi, by the Rajputana-Malwa and B. B. & C. I. Railways, and the through rates to Kurrachee *via* Lahore by the Indus Valley, Punjab Northern, and Sind, Punjab and Delhi Railways:—

COMPARATIVE TABLE.

G. I. P. Local Rates. From Stations to Bombay			Through Rates to Bombay <i>via</i> Delhi by Rajputana- Malwa and B. B. & C. I. Railways.			Through Rates to Kurrachee <i>via</i> Lahore by Indus Valley, Punjab Northern, & Sind, Punjab & Delhi Railways.		
Mileage.	Stations.	Rate per ton per mile at 27.22 maunds to a ton.	Mileage.	Stations.	Rate per ton per mile.	Mileage.	Stations.	Rate per ton per mile.
		Pies.			Pies.			Pies.
341 ...	Khangaum...	9.42	888.	Delhi	4.95	1,169.	Delhi	4.68
363 ...	Akola.....	9.00	927.	Meerut	5.13	1,129.	Meerut	4.70
417 ...	Hurda	7.31	1,053.	Umballa	5.37	1,003.	Umballa	4.72
443 ...	Sewnee	7.25	1,119.	Ludiana	5.42	937.	Ludiana	4.80
494 ...	Sohagpore...	7.11	1,203.	Umritsur ...	5.52	853.	Umritsur ...	4.79
520 ...	Nagpore ...	6.28	1,235.	Lahore	5.57	821.	Lahore	4.87
554 ...	Kareli	6.34	1,409.	Rawul Pindée	5.81	995.	Rawul Pindée	4.84
616 ...	Jubbulpore..	5.70	1,472.	Attock	5.84	1,058.	Attock	4.86
			1,516.	Peshawur ...	5.83	1,102.	Peshawur ...	5.26

The most noticeable feature in this table is the striking contrast between the low through rates per ton per mile from the wheat fields of Upper India to Bombay and Kurrachee, and the high rates charged by the G. I. P. Railway from the stations in the Central Provinces to Bombay. Moreover, in the list of the through rates to Bombay *via* Delhi by the Rajputana-Malwa and B. B. and C. I. Railways, a reduction of the present rate of thirteen annas and six pie per maund from Delhi to Bombay to eleven annas for wheat, and $11\frac{1}{2}$ annas for other grains and seeds of the same class, other stations being treated proportionally, is to take effect from the 1st May next. It is hoped that these reduced rates will lead to an addition to the export of these articles from this port.

The effect of the low through rates *via* Lahore to Kurrachee is, however, already apparent in the extraordinary increase in the exports of wheat from that port, shown in the Accounts relating to the Trade and Navigation of British India, published by the Government of India. From these Accounts, the following extracts for the last five years are taken:—

Wheat exported from Sindh—

			Cwts.
In the 12 months ending 31st March 1879.....			22,357
Ditto ditto 1880.....			274,764
Ditto ditto 1881.....			169,465
Ditto ditto 1882.....			1,852,334
In the 11 months ending 28th February 1883, 2,425,926			
cwts., and taking the average of the year for the			
month of March 1883, the Returns of which have			
not yet been published, say 220,539 cwts., we			
arrive at a total in the 12 months of			
			2,646,465

Mr. Barnett in his letter to the Secretary of the Chamber, dated 2nd August 1882, remarks that a reference to the Government analytical returns of railway working for the year 1881, will show to the Committee that, at the present rates, the grain traffic does not pay its share of the guarantee. If, in fixing their rates, the Railway Company have adopted the principle that each particular rate shall contribute a certain amount of profit, without reference to the nature and circumstances of the traffic, such as the rate being only indirectly remunerative by filling rolling-stock which would otherwise run empty, or being likely to create new traffic by encouraging industry or cultivation, then the

Committee respectfully submit that the principle is in itself erroneous, that it is contrary to the practice of railway management in Great Britain and America, and that it is entirely opposed to the policy which the Government had in view in sanctioning the construction of the G. I. P. and other Indian lines, that they would serve to multiply produce and increase the national wealth. The principles according to which, in the opinion of the Government of India, railway rates and fares should be regulated, are fully explained in the letter addressed by the Government of India to the Secretary to the Government of Bombay, Public Works Department, No. 162 R. T., dated Fort William, 2nd March 1883. The enunciation of these principles has been received with great satisfaction by the Chamber, and, if they are put into practice, they will, there can be little doubt, have a very beneficial effect on the country, and on the commerce of India; while the Railway Company itself would, by the increase of traffic induced by the lower rates, benefit in the long run financially, and the Committee desire earnestly to commend them to the consideration of your Board.

In the Financial Statement of the Government of India for 1883-84, published on the 15th March last, a very valuable account of the wheat trade is given. It is there shown that the largest market for Indian wheat—as for most of the other products of India—is England, and that the English market in 1882 was supplied with wheat from abroad to the extent of 64,171,622 cwts., of which the United States furnished 35,059,623 cwt., Russia 9,571,021 cwts., and India 8,477,479 cwts. In the 20 years from 1840 to 1860, the wheat production of the United States rose from 10 to 20 million quarters: in the 20 years from 1860 to 1880 it grew from 20 to 60 million quarters, and their extent of good wheat land is practically unlimited. The quantity of wheat in India available for export is, it is estimated, about one million tons, and some high authorities are of opinion that under favourable conditions as regards the prospects of a market, it would be possible within a few years to double the amount of wheat available for export, that is to say, to increase it to about 2 million tons. In para. 168 of the Financial Statement is the following passage:—“There can be no doubt that very large quantities of land are awaiting cultivation, especially in the Punjab, Burma, Assam, and the Central Provinces. In

the eastern districts of the Central Provinces, the new lines of railway will now open out a very large tract of wheat-producing country, which up to this time has been unable to find a market for its surplus produce owing to defective means of communication." Paragraphs 170 to 181, which treat of the advantages possessed by the United States over India in the matter of ocean and railway freight, are especially deserving of attention. From para. 174, the following extract is taken :—" In the matter of railway rates also, American is at a great advantage as compared to Indian wheat. So far back as 1876, the rate from Chicago to New York, a distance of 960 miles, was on an average 17 cents a bushel, or £1-5-6 per ton, for the whole distance. In 1878 and 1879, the published tariff rate was 20 cents. per 100 lbs. (18s. 4d. per ton) for the whole distance, but, under stress of competition, wheat was carried from time to time in 1879 to New York at 18, 15, and even as low as 10 cents per 100 lbs. or 9s. 2d. per ton, for the whole distance. Sir James Caird, in his evidence before the Royal Agricultural Commission in December 1881, said that the rate had been reduced as low as $\frac{1}{4}$ d. per ton per mile. This rate is equal to £1 per ton for the whole distance. The writer of an interesting pamphlet recently published in India gives 14·5 cents a bushel as the latest rate he has seen published. This is equal to £1-1-9 per ton for the whole distance." And in para. 180, it is shown that from Jubbulpore to Bombay, a distance of 616 miles, the rate is 10 annas 5 pie per maund, equal to £1-9-8½ per ton for the whole distance; that is to say, it costs considerably more to carry a ton of wheat 616 miles over the Great Indian Peninsula Railway than it does to carry the same quantity 960 miles over the American line. Indian wheat, moreover, is quoted in the London market at a lower price than American, or Australian; the average comparative prices during 1882 were American, best 48s. 9d. per quarter, Calcutta Club No. 1, 43s. 1d., Australian, best 50s. 5d.

To facilitate the export of wheat to Europe, the Government of India has, as already observed, with the concurrence of the Agent of the B. B. & C. F. Railway Company, from 1st May, reduced the rate from Delhi to Bombay to 11 annas a maund; which will enable wheat to be delivered in London at a reduction of 1s. 6d. per quarter. The Committee hope that a consideration of the facts herein set forth will induce

the Board of Directors of your Company to adopt a similar liberal policy, for they believe that it is only by a reduction of the G. I. P. R. grain rates to a point which will tend to stimulate cultivation and trade in ordinary times, that the export of Indian wheat in the face of the many disadvantages which it labours under in the English and Continental markets, is likely to be maintained.

In conclusion, the Committee desire me to ask you to be so good as to forward this letter to your Board of Directors by the earliest opportunity.—I have, &c.,

JAMES THORBURN, Chairman.
J. GORDON, Secretary.

No. 3961 OF 1883.

GREAT INDIAN PENINSULA RAILWAY COMPANY,
BOMBAY, 20th April, 1883.

The SECRETARY CHAMBER OF COMMERCE, Bombay.

SIR,—I have to acknowledge receipt of your letter of the 19th instant regarding grain rates. The Agent will forward the letter to the Board by to-day's mail.—I have, &c.,

H. I. P. THOMSON, Secretary.

BOMBAY CHAMBER OF COMMERCE, 24th April, 1883.

The SECRETARY to GOVERNMENT, Public Works Department,
(Railways), Bombay.

SIR,—I am directed to forward herewith, for the information of Government, ten copies of the letter which the Committee of the Chamber have addressed to the Agent of the G. I. P. Railway Company regarding that Company's grain rates; and at the same time to ask the favour of your kindly transmitting copies of the same to the Government of India for their information.—I have, &c.,

J. GORDON, Secretary.

No. 758 OF 1883.

PUBLIC WORKS DEPARTMENT (RAILWAYS),
BOMBAY CASTLE, 2nd May, 1883.

To the SECRETARY CHAMBER OF COMMERCE, Bombay.

SIR,—I am directed to acknowledge the receipt of your letter dated 24th April 1883, and to inform you that a copy of the letter which the Committee of the Chamber addressed to the Agent G. I. P. Railway Company regarding that Company's grain rates has been forwarded to the Government of India.—I have, &c.,

R. T. FRERE, Major, R.E.,
Under-Secretary to Government.

No. 892 OF 1883.

PUBLIC WORKS DEPARTMENT (RAILWAY),

BOMBAY CASTLE, 24th May, 1883.

To the SECRETARY CHAMBER OF COMMERCE, Bombay.

SIR,—In continuation of my letter No. 758, dated 2nd instant, I am directed to forward for information copy of a reply from the Government of India, No. 503 R. T., dated 9th idem, regarding the Great Indian Peninsula Railway Company's grain rates.—I have, &c.,

R. T. FRERE, Major, R.E.,
Under-Secretary to Government.

No. 503 R. T.

GOVERNMENT OF INDIA, PUBLIC WORKS

DEPARTMENT (RAILWAY TRAFFIC),

SIMLA, 9th May, 1883.

To the SECRETARY to the GOVERNMENT of Bombay, Public Works Department.

SIR,—In acknowledging the receipt of your letter No. 757, dated 2nd May 1883, furnishing, for information, copy of a letter addressed by the Committee of the Bombay Chamber of Commerce to the Agent, G. I. P. Railway Company, regarding that Company's grain rates, I am directed to state that the Secretary of State has been moved by the Government of India to urge on the London Board of the G. I. P. Railway a reduction of these rates.—I have, &c.,

R. A. SARGEANT, Major, R.E.,
Officiating Under-Secretary.

No. 5583.

GREAT INDIAN PENINSULA RAILWAY COMPANY,

BOMBAY, 4th June, 1883.

The SECRETARY CHAMBER OF COMMERCE, Bombay.

SIR,—I beg to enclose, for the information of the Committee of the Chamber, copy of a letter, dated the 20th April last, addressed by my Board of Directors to the Under-Secretary of State for India, with reference to a communication received by the Secretary of State from the Liverpool Chamber of Commerce on the subject of the rates charged on Indian Railways for the conveyance of wheat and seeds.

This expression of the Board's views answers in effect the letter from the Committee of the Chamber, dated the 19th April last, and previous communications.

I take this opportunity of informing you that wheat and other grain has, during the past few weeks, been offered at the stations for transport to Bombay in quantities beyond the engine-power at our command to move without some detention; every effort, however, has been and will continue to be made to reduce this delay to a minimum, and I am pleased to add that, with the authority of Government,

orders are now at home for sixty additional engines, some of which are expected to arrive very shortly.—I have, &c.,

G. A. BARNETT, Agent.

No. 53 of 1883.

GREAT INDIAN PENINSULA RAILWAY COMPANY,
OFFICES, No. 3, NEW BROAD STREET, E.C.,
LONDON, 20th April, 1883.

To the UNDER-SECRETARY OF STATE for INDIA, India Office, S.W.

SIR,—I have the honor to acknowledge receipt of your letter, P.W. 141, of the 21st ult., enclosing copy of a communication, dated 22nd January last, addressed to the Secretary of State by the Liverpool Chamber of Commerce on the subject of the rates charged on Indian railways for the conveyance of wheat and seeds.

2. That communication has had the careful consideration of the Board of Directors, who fully realize the importance of affording every facility to the growth of the export trade in wheat and seeds, and all the more because it is to the extent to which this particular traffic is obtainable during the second half of the year, that the Company must look to uphold their earnings during that time of slackness in other better paying traffic.

3. The bearing of Indian railway rates on the trade in oil-seeds may be briefly disposed of. With the opening of the Suez Canal, the reduction in sterling value of the rupee consequent on the demonetisation of silver by Germany, and the remission of the export duty in India in 1875, every obstacle to the free supply of oil-seeds from that country has been removed, and that there is ample margin for all freight charges between the cost of production and the price to the consumer may be inferred from the fact that within the last thirty years, or since the opening of the Great Indian Peninsula Railway, the price realized by the producer in India has more than doubled. The supply forthcoming has been adequate to the demand, exports showing only such variations as are attributable to the usual vicissitudes of seasons in the countries whence supplies are drawn. The following have been exports of the last ten years from Bombay :—

—	Linseed.	Gingelly.	Rape and Mustard.	Total.
	Tons.	Tons.	Tons.	Tons.
1873.....	14,197	4,068	290	18,555
1874	40,606	12,360	368	53,334
1875.....	79,246	22,478	11,252	112,983
1876.....	133,873	20,623	19,874	174,370
1877.....	97,469	13,522	36,907	147,918
1878	34,311	21,348	28,413	84,072
1879	24,017	27,195	11,170	62,382
1880.....	85,103	26,445	10,974	122,522
1881.....	106,843	50,342	38,059	195,244
1882.....	159,984	55,915	37,063	252,962

4. As regards wheat, it appears to the Board that the comparison

which the Liverpool Chamber of Commerce draws between the cost of transport in America and that in India, and the argument founded thereon, show that the Chamber misapprehends the conditions under which wheat can be exported from these respective countries and hence assumes that "it only remains to be seen whether the carriage (in India) can be cheapened sufficiently and the irregularity of supply overcome."

5. Turning first to the question of supply, I am requested to observe that in America wheat is essentially an export commodity. The value of bread-stuffs exported varies from one-fourth to one-third of the total exports of the United States, which amounted in 1880 to £167,000,000 sterling, and in any statistics of the development of railway mileage in America, the quantity of wheat and corn produced is set forth as the chief measure of utility and progress. Nor is America dependent alone on her railways; her lakes, rivers, and canals, giving facilities in water carriage from the grain-producing State to the seaboard, which additional facilities in summer tend to check the charge for transport by rail.

6. A country, so situate, possessing 100,000 miles of railways radiating from the principal cities in her vast prairie-lands, populated as these are by our own race, employing every appliance in agriculture known to civilization, affords no basis for comparison of a practical nature with India. In America, moreover, no large operator in, not even a considerable grower of, wheat is without daily telegraphic intelligence as to the course of European markets, and he can as easily by wire sell his produce to a buyer in Europe at a price covering railway and sea freight, as if he were in New York or London. By an imperative necessity of the stream of immigration, the extension of railways in America advances, and in the last three years has been at the rate of 8,000 to 10,000 miles per annum.

7. India, on the other hand, has had no similar incentive to the development of her grain production. Her crops have been grown hitherto in view of the supply of her own population, and the export of wheat has been but tentative; sometimes, it may even be said to have been an accident of trade, induced for instance by the necessity of filling up a chartered ship with the cheapest produce in the absence of other cargo. From time immemorial it has been the habit of the people to lay by in pits the surplus of years of abundant harvests and so provide stores in every part of the country against recurring seasons of drought and consequent failure of crops. These stores, however, fail to represent fully such surplus, for, to quote from a valuable communication of the Bombay Chamber of Commerce to the President of the Famine Commission in May, 1879, "in the grain-producing districts of Central India in years of abundance the more perishable descriptions of produce cease to have almost any value, indeed are often left to perish on the fields," while the Commissioner of the Central Provinces in his report of 1876-77 says, "a run of a few good seasons is as much dreaded by the agriculturist as a failure of the crops, for his produce is then a drug in the market, and he must sell at any price for money to pay the rent of his land." It may be here appropriately added, with reference to the quality of Indian wheat alluded to by the Chamber of Commerce, that it is the system of storing grain in pits, in the absence of a ready access to

markets, which causes the inferior condition in which imports are often found, it being indisputable that India is capable of growing and does grow some of the finest wheat procurable in the world.

6. The wide divergence in the estimates of the production of wheat in India, say from 26 millions of quarters to 40 millions, shows the difficulty of arriving at an accurate computation of her capability to supply out of her surplus any considerable proportion of the wants of Europe. A beginning, however, has been made in this direction since the opening of the Suez Canal, aided by a low cost of ocean transport by steam and a low rate of exchange, and the following figures show what has been done from Bombay, particularly in connection with this railway. In the official year 1872-73 the export of wheat was only 3,743 tons; in 1873-74 the removal of the export duty led to an increase to 21,722 tons. Adopting the calendar year thereafter, the figures have been :—

—	Export.	Carried on G. I. P. Railway.
1874	33,080 tons.....	Not distinguished from food-grain.
1875	38,697 „	Do. do. do.
1876	59,332 „	Do. do. do.
1877	58,863 „	Do. do. do.
1878	11,685 „	99,012 tons.
1879	6,007 „	102,428 „
1880	94,716 „	162,112 „
1881	462,566 „	504,708 „
1882	417,954 „	377,699 „

9. The enormous expansion of the exports in 1881 and 1882 was due to short crops in America and Europe in 1881, and doubtful prospects of the European harvest of 1882 until late in the summer, when, a fair average being assured, Indian wheat became practically unsaleable, and from 291,112 tons in the first six months the export dropped to 126,842 tons in the latter six months. Simultaneously the Egyptian expedition withdrew for a time from the trade almost every available steamer, but even on the return of the steamers to their ordinary trade and a freight charge reduced to twenty shillings per ton, the wheat demand had so thoroughly collapsed that, excepting for some parts of Southern Europe, there was no inducement to bring the produce from the interior. Yet the traffic Manager repeatedly wrote that there were no signs of exhaustion of stocks in the districts of growth. Nor was it a question of price. Throughout 1881 and 1882 there had been the usual fluctuations in value, but from first to last prices in Europe presented no obstacle to export from Bombay. There is so great a variety of wheat from all lands—and from India notably—that it is difficult to show the changes of value in any concise form; but adopting the average Gazette prices, as published in this country, it will be found that from July to December, 1880, when chartering arrangements were being made on an extensive scale for the following season's wheat business, the average prices ranged between.. ... 40/- and 45/- per quarter.

In January to April, 1881, between. ... 40/9 „ 44/9 do.

From 1st May to middle of Aug., between. 44/9 „ 47/1 do.

Exceedingly unfavourable harvest weather then drove up prices to

55/- on 2nd September, from which date they steadily relapsed to 44/3 on 31st December. In 1882, the price varied slightly between 44/9 and 46/- till end of April; thereafter there was a gradual rise to 50/6 in the third week of August, from which date, harvest prospects being favourable, the average fell to 39/2 in October.

10. During the period thus reviewed, the highest and lowest prices touched for No. 1 Bombay wheat were respectively 53/- and 44/- per quarter, but it does not appear that the prices for quantity to arrive (which really regulate the trade) ever exceeded 50/- while the average of the year was not over 47/. Similarly the lowest quality of Bombay wheat ranged from 36/- to 41/.

11. Within the same period the charge for wheat carried over the Great Indian Peninsula Railway from Jubbulpore to Bombay, 616 miles, was equal to 6s. 6d. per quarter up to the 1st May 1881, on which date the charge was advanced to a rate equal to 6s. 8d. per quarter. Jubbulpore may be taken as the extreme lead of the grain traffic originating within the system worked by the Great Indian Peninsula Railway Company. It will thus be seen how little the existing rates of this Company count in obstructing a regular flow of wheat from India to Europe.

12. An able pamphlet recently published in Calcutta estimates "that the prime cost at which wheat is raised in India cannot be more than about 5s. 6d. to 6s. 6d. a quarter." The average cost of carriage from thirteen of the largest wheat-producing districts to the nearest railway station is given as 1s. 6d. per quarter. The prime cost at railway station is thus brought up to 7s. to 8s. per quarter, allowing for say thirty miles of country carriage; doubling that distance, the cost would be 8s. 6d. to 9s. 6d. per quarter.

13. On the other hand, the same authority gives the range of prices between 1870 and 1876 at Jubbulpore as 14/9s. to 26/7s. per quarter, and 22/3s. as the price at the beginning of this year.

14. Adopting the price of 22s. 4d. at Jubbulpore, and adding thereto the railway charge of 6s. 8d., gives the cost in Bombay 29s., thus leaving upon a market price of 44s. in London 15s. per quarter for ocean freight and other charges, of which not more than 9s. 9d. is ocean freight, calculated at 35s. per Bombay ton of 16 cwt.

15. The following comparison shows the approximate cost price and transit charges of Indian and American wheat, brought down to the latest date to which information is obtainable :—

Indian Wheat.		American Wheat.	
	Per quarter. s. d.		Per quarter. s. d.
Price at Jubbulpore...	22 4	Price at Chicago, as per pamphlet ...	32 11
Ry. charge from Jubbulpore to Bombay, at 10a. 9p. per maund...	6 8	Ry. charge to New York at 30c. per 100 lbs. ...	6 2
Ocean freight—Bombay to London, at 35s. per ton of 16 cwt ...	9 9	Ocean freight—New York to London, per s.s., at 3½d. per bushel ...	2 4
	38 9		41 5
Market price, London...	44s. to 45s.	Market price, London...	46s. to 48s.

16. The above analysis as regards Indian wheat may be further amplified as follows :—

PRODUCTION AND DELIVERY TO RAILWAY.		Per quarter.
Estimate cost of production in districts where grown, according to pamphlet already quoted ...	s. d.	
Carriage to railway station, at rate of 1s. 6d. per quarter for 30 miles, or 3s. per quarter for 60 miles ...	say	6 6
	say	3 0
Cost of production and delivery (60 miles) to railway...		9 6
(a) Margin between this and market price at Jubbulpore ...		12 10
Price at Jubbulpore..		22 4

JUBBULPORE TO BOMBAY.

Railway charge at 593d. per ton per mile, being below the average rate necessary to yield the guaranteed interest, according to Government statistics ... 6 8

BOMBAY TO LONDON.

Ocean freight at 35s. per ton of 16 cwt., which covers Suez Canal dues of 10f. 50c. per ton register ... 9 9

Cost and freight to London ...	38 9
(b) Margin between this and the market price in London ...	5 3

London market price, 16th April, 44s. to 45s.... 44 0

(In the above calculations the ex. has been taken at the rate of 1s. 8d. per rupee.)

17. It is thus apparent that the cost in London turns chiefly upon the figure indicated by (a) in the foregoing analysis, and that is the point to which, in the opinion of the Directors, the attention of all concerned in the development of the trade should be directed. After making due allowance for the two stages of production and delivery, according to the highest estimates yet put forward, the disproportion of the margin left (a) is remarkable. The second margin (b) is somewhat higher than the corresponding figure relating to American wheat. At all events it is clear that the element of cost due to railway carriage is the one least capable of any reduction.

18. In view of the margin (a) which these figures indicate, the Directors of this Company cannot conceive it to be their duty to give up any part of the freight charge now earned, so long as they do not see that a reduction would certainly, or even probably, increase the traffic. As it is, the rates charged would not, if the traffic were confined to grain and seeds, with the coaching traffic, produce a net return of the 5 per cent. guaranteed interest on the capital invested in the railway, and it was on a careful investigation of the cost of working that the Directors in May, 1881, raised their rates for these products.

19. As respects the request in your letter for such facts as may be at the command of the Directors relating to the actual cost of transporting grain on the railway under present circumstances, the Directors regret that they have no means of distinguishing between the expenses which may be considered due to the movement of particular commodities. They are, of course, aware that to the extent to which goods are received in large quantities, easily handled in bags, as is the case with grain, some of the expenses which necessarily attach to goods under other conditions, are avoidable; and also that it is

advantageous to obtain quantities in given train loads. Such special conditions have not been overlooked in fixing rates, and indeed it is owing to those favourable conditions that the Company have been able to fix the existing low rates for the traffic in question. The low class rates now in operation, it must be remembered, are applicable to about 70 per cent. of the whole public goods traffic, estimated by weight and distance carried. Nearly the whole of this traffic having to be conveyed from the interior to Bombay, the return trains to provide for it are, of necessity, run in a great degree empty, in the absence of sufficient balancing traffic into the interior. It may also be mentioned that the average receipt from the whole public merchandise traffic for the half-year to the 30th June last, was 10'16 pies (or 1'058d.) per ton per mile, the grain rates being on the average not more than 6 pies (or '625d.)

20. Having regard to the above-mentioned disproportionate percentage of the low class as compared with other traffic, it is obvious that the rate of the former cannot be reduced below its present figure without involving a large augmentation of the rates of the remaining 30 per cent. of the traffic to ensure the same total result; but as it would be impossible to make any such increase of the general rates, the idea of reducing the existing grain traffic rates cannot, the Directors consider, be entertained at present.

21. The following statement of imports of wheat into the United Kingdom from all countries, in the last two years, will illustrate both the irregularity of supply and the ready response which India, with all her disadvantages of internal transport, can make to any real demand for her products:—

IMPORTS OF WHEAT INTO THE UNITED KINGDOM.

From					1881.	1882.
					Tons.	Tons.
Russia	...	...	...	...	200,945	478,551
Germany	...	...	...	...	68,086	154,196
France	...	...	...	...	335	369
Turkey	...	...	...	...	1,677	26,322
Roumania	...	...	...	...	10,743	9,730
Egypt	...	...	...	...	53,524	8,743
U. S. Atlantic	...	...	...	...	1,239,828	1,017,361
Do. Pacific	...	...	...	...	562,076	735,620
Chili	...	...	...	...	54,590	82,818
*British India	...	...	...	...	365,442	423,874
Australia	...	...	...	...	148,905	123,756
British N. America	...	...	...	...	143,043	134,241
Other Countries	...	...	...	...	2,939	13,000
Total...					2,852,133	3,208,581
EXPORTED TO GREAT BRITAIN.						
*From Bombay	...	...	...	...	187,082	156,666
Do. Calcutta	...	...	...	...	205,919	156,924

22. The Directors of this Company cannot too strongly express their accord with the Liverpool Chamber of Commerce in urging the

necessity of a much more rapid development of Indian railway communications than has hitherto taken place. Unlike America, India has no immigration to stimulate such development, and her population is so apathetic, that of the £100,000,000 invested in her railways, not more than about one per cent. is held in India. All therefore depends upon the initiative and capital of England, and although the Government have determined to cease guaranteeing interest on capital provided for further Indian railways, and English investors have consequently been slow to find money for even the most promising of recently projected lines, the Directors trust such encouragement will be given as will attract the enterprise and capital of this country to the extension of the railway system in India.—I have, &c.,

THOMAS R. WATT.

BOMBAY CHAMBER OF COMMERCE, *17th October, 1883.*

The AGENT of the G. I. P. RAILWAY COMPANY, Bombay.

SIR,—I am directed to acknowledge the receipt of your letter No. 5583, of the 4th June, enclosing, for the information of the Chamber, copy of a letter addressed by your Board of Directors to the Under-Secretary of State for India on the 20th April last, with reference to a communication received by the Secretary of State from the Liverpool Chamber of Commerce, on the subject of the rates charged on Indian Railways for the conveyance of wheat and seeds. The delay which has occurred in replying to this letter has arisen from the time occupied in the references which the Chamber felt it desirable to make to the Chief Commissioner of the Central Provinces, and other authorities, on certain points raised by the Company.

The letter addressed by your Directors to the Under-Secretary of State has had the careful consideration of the Chamber. The general import of this letter is apparently intended to show that India is incapable of supplying any considerable proportion of the wants of Europe: that the condition of Indian wheat is inferior; and that reduced rates of carriage would neither increase the export, nor overcome the irregularity of supply. A number of propositions are advanced in support of this contention, nearly every one of which would furnish a strong argument for the contrary view, while the estimates of the cost of production of wheat, and of the cost of transporting it from the

N.B.—Throughout this letter the rupee has been assumed as equal to 1s. 8d.

railway stations on the G. I. P. line to London, in paragraphs 15 and 16, on which the Directors principally justify their refusal to reduce their rates, are so erroneous and misleading that the Chamber can only express its regret that, with the facilities which the Railway Company possess, both in India and London, for procuring accurate information, they did not obtain it, before publishing their letter. No allusion whatever is made in it to the utter insufficiency of the rolling-stock with which the line was furnished, and to the line being frequently blocked with grain which they were unable to carry, the Company being thus enabled to continue earning unduly large profits at the expense of the trade, which has for years been struggling for existence, and which, as Indian wheat is becoming better known and appreciated, would, with proper and reasonable facilities, assume far greater proportions than at present. It is, therefore, on every ground desirable that the statements made by the Railway Company should be carefully sifted, and, where necessary, corrected, and the actual state of the line made known; and the Chamber proposes dealing with these matters in the order of the paragraphs in which they appear as marginally noted.

The published statements of the Goods Traffic of the G. I. P. Railway Company, and of the wheat, other food-grain, and oil seeds carried, bear out the remark of the Directors that the exportation of these articles is much greater in the first than in the second half of the year, which arises from the fact that the harvests are reaped in February and March, and from the desire to hurry off shipments of the new crops before the rains set in. This, however, is being gradually modified with the facilities which the Prince's Dock affords for shipments during the S. W. monsoon, and these will be further increased when the new Dock is open. The wheat trade, moreover, which now languishes in the early part of the monsoon, would be greatly augmented if sufficient warehouse accommodation were provided by the Railway Company at the stations in the districts.

The Chamber agrees with the Railway Company that the reduction in the sterling value of the rupee consequent on the demonetization of silver

Letter from T. R. Watt, Esq., to Under-Secretary of State for India. Para. 2.

Para. 3.

by Germany, and the remission of the export duty in India in 1873, have stimulated exportation ; and doubtless the exports of Linseed, Gingelly, Rape, and Mustard Seeds, as shown by the Company, in the table under para. 3, exhibit, after allowing for the short crops during the famine years of 1878 and 1879, a considerable increase. But this increase, and the margin between the cost of production and the price to consumers, which the Company infer to be ample from the fact that within the last 30 years, or since the opening of the G. I. P. Railway, the price realised by the producer in India has more than doubled, were, after allowing for the operation of the stimulating causes above mentioned, altogether due to the cheapening of the cost of carriage from the districts to the seaboard, by the extension of railway communication with, and the consequent opening out of, the producing districts. It was only natural that with railway communication, and the opening out of the country, the trade in seeds should have doubled. The Railway Company assert that the supply of seeds from India has been adequate to the demand, but the Chamber does not admit the correctness of this assertion. That the cost of the conveyance of seeds from the producing districts to the Port since the opening out of the country is much less than it was previously, and that the export has consequently increased, is doubtless true, but it does not follow that if the rates of carriage by the Railway Company had been lower, the trade would not have been developed to a much greater extent and much more rapidly. The demand for any article, *cæteris paribus*, depends chiefly on the price, and the same universal law which applies to all commodities is equally applicable to seeds, that whatever helps to lower the price to the consumer will stimulate consumption, and consequently increase the demand ; and not only this, but, by a reduction in prices, other countries may be forced to turn their attention to other kinds of produce, as has recently been done by English farmers, causing thereby a greater demand for Indian wheat and seeds. It is the interest and duty of the Railway Company to enlarge the demand by reducing the cost of carriage, and consequently the cost of the article, to lowest possible point. Cheapness and increased consumption, as a rule, go together, tending above all other things to the general prosperity, in which the railway itself participates.

These paragraphs seem to be intended to show that,
as regards wheat, India cannot

Paras. 4, 5, and 6. complete with America because
of the facilities afforded by the

latter country for the transportation of the article by rail and water carriage; but, on this point, we have only to refer to the history of the trade since railways were opened in India to prove that India is as much a wheat-exporting country as America, and that the great strides made in the trade during the last few years are to a great extent, if not entirely, due to railway extensions. The Government of India in a recent estimate of the area under wheat cultivation in India came to the conclusion that the present area was about 19,329,200 acres, yielding on an average from 8 to 13½ bushels an acre, or about 26½ million quarters, that is, 15½ million quarters in excess of the whole requirements of England. And in dealing with this estimate the writer of an anonymous pamphlet, entitled "*Indian Wheat versus American Protection, &c.*," forwarded to you with my letter of the 9th July last, at page 10, remarks:—"At the same time the average yield per acre assumed in this estimate, 8 to 13½ bushels is nothing compared with the yield that would be produced under a proper system of farming, the average yield per acre in other countries being not less than 28 to 32 bushels. Experiments carried on in the Government farms have proved that irrigation with a proper system of manuring more than trebles the average Indian yield, and there can hardly be a doubt that farming in India would improve all along the line directly it became the interest of the Indian peasant to materially increase his production." And in treating of the capability of increased wheat production in India, the Hon. Major Baring, in para. 168 of the Financial Statement for 1883-84, says:—"Some high authorities are of opinion that under favourable conditions as to the prospect of a market, it would be possible within a few years to double the amount of wheat available for export, that is to say, to increase it to about 40 million cwts. There can be no doubt that very large quantities of land are awaiting cultivation, especially in the Punjab, Burma, Assam, and the Central Provinces. In the eastern districts of the Central Provinces the new lines of railway will now open out a very large tract of wheat-producing country, which up to the present time has been unable to

find a market for its surplus produce, owing to defective means of communication." In para. 167 of the Financial Statement, Major Baring takes the present total yield of wheat in India at about $6\frac{1}{2}$ million tons, of which it may, he adds, be roughly said that about one million tons are available for export. If to this present yield we add the further $6\frac{1}{2}$ million tons which the country is capable of producing, and which would with increased railway facilities ere long be produced, we arrive at a total yield of 13 million tons, of which, according to the above estimate, only 2 million tons would be available for export. The Chamber, however, totally dissents from the view that out of this vast yield only 2 million tons would be available for export without trenching on the food supply of the people, for it is a well-known fact that the consumption of wheat in India is not large, the bulk of the inhabitants subsisting on cheaper staples. On the contrary, it believes that a very large proportion of the total yield would be exported, and the requirements of England ere long could be more than supplied by India alone, if the producing districts were opened out, and cheap communication between them and the coast established. That a vast amount of wheat is held in India is apparent from the fact that, even with our present defective communications, the export could rise from 2,195,550 cwts. in 1880 to 7,444,449 cwts. in 1881, and again to 19,863,530 cwts. in 1882, or more than one-half of England's total import of wheat from America in the year 1881, and this without any appreciable rise in the price of wheat in the country. Although the processes of American are superior to those of Indian agriculture, and the yield per acre is larger, yet the cost of production in India is smaller. India, moreover, is, wherever opened out, as well supplied as America is with daily telegraphic intelligence as to the course of European markets, and merchants at up-country stations can as easily by telegraph sell their produce to a buyer in Europe, at a price covering railway and sea freight, as if they were in Bombay or London. It appears to the Chamber that railway facilities and particularly low rates of carriage, are chiefly required to enable India to compete successfully with America for the wheat supply of Europe.

In this paragraph the Railway Company observe that
 Para. 7. India has had no similar incentive
 to the development of her grain

production, which the great and rapid extension of railways has given to America; and in this view the Chamber entirely concurs. It is the great want of railway facilities in India which is retarding the development of the country, and it is these facilities which the mercantile communities of India demand, and are entitled to expect. Down to a recent date, the people grew wheat, and every other description of produce for which the land was suitable, but they had no markets for their produce; and it may be said that, in these circumstances, the crops were then grown in view of the supply of their own wants. It was not, indeed, until the opening of the Suez Canal that the export of wheat to Europe became practicable. For many years previously it was well known that wheat was extensively cultivated in India, but the efforts of the Chamber to open out an export trade by small experimental shipments *via* the Cape were not successful. The export trade may, for all practical purposes, be said to date from the year 1873, when the export duty was abolished. The export from India in the official year 1873-74 amounted to 1,755,954 cwts. The next impetus which the trade received was in September 1875, when the G. I. P. grain rates were considerably reduced. The exports in the following year 1876-77 rose to 2,498,285 cwts.; they were interfered with during the next three years by the famine in Southern India. In the year ending 31st March 1881 they amounted to 7,444,449 cwts., in 1882 to 19,863,520 cwts., and in 1883 to 14,151,765 cwts., while for the five months ending 31st July 1883 they amount to the large total of 13,720,917 cwts. The Chamber admits that until 1875 the export of wheat was but tentative: the quality of the article was unknown, and the export affected by the prices obtained. It is, however, no longer tentative, for the quality of Indian wheat is now as well known in the European markets as the wheat of other countries. The practice of storing in pits the surplus of years of abundant harvests arose from the cultivators having no warehouses, but very much less wheat would be so stored if increased railway facilities were afforded, and for two reasons—(1) the better chance of selling, and (2) if more communications were opened there would be less necessity for storing. Storing in pits, however, although a rude method, is the best way of preserving wheat from rain and other injurious influences. The Chamber does not believe

that it is the system of storing grain in pits which causes the inferior condition in which imports are often found, for it is now ascertained that wheat which has been pitted even for a year is much more free from weevil than grain stored for a similar period above ground. The inferior condition alluded to is doubtless attributable to the admixture of dirt and other foreign substances, and this the Government are being urged to do all in their power to remedy. In connection with this practice of storing in pits, the Railway Company quote the following passage from a letter addressed by the Chamber in May 1879 to the Famine Commission:—"In the grain-producing districts of Central India in years of abundance the more perishable descriptions of produce cease to have almost any value, indeed are often left to perish on the fields," and from the report of 1876-77 of the Commissioner of the Central Provinces—"A run of a few good seasons is as much dreaded by the agriculturist as a failure of the crops, for his produce is then a drug in the market, and he must sell at any price for money to pay the rent of his land." It is needless to observe that these passages were cited by the Chamber, and by the Commissioner of the Central Provinces, when they were respectively urging and showing the great necessity which existed for the opening out of the Central Provinces by means of roads and railways. In a previous part of the same letter, the Chamber, after detailing the satisfactory results which had followed from the reduction in rates made by the G. I. P. Railway Company in September 1875, remarked:—"The G. I. P. Railway Company's grain rates are still much too high, and a further reduction would, the Chamber believes, result in a yet greater expansion of the export trade. But these illustrations of the effect of reduced rates prove that even railways in India may be of little avail in fully developing the resources of the country, if the rates for the carriage of produce are not reduced to the low scale necessary to attract the the produce of the districts through which they pass." Since, however, that letter was written, the Railway Company, on 1st May 1881, increased their grain rates from 3.36 to 21.79 per cent. As regards the quality of wheat generally, it is unfortunate that the Indian wheat crop is reaped in March, and that, as the Railway Company are then busy with their cotton traffic, a large proportion of it cannot be brought down to Bombay until after the

S. W. monsoon has set in, when, from exposure to rain, it becomes weeviled. It is on the other hand an advantage to the districts which the G. I. P. Railway serves as well as to the trade if wheat is brought down to the Port and shipped before the monsoon, arriving when stocks are depleted at home, before the English harvest comes in, say, about the beginning of August. In concluding its remarks on this para. the Chamber desires to observe that nothing could prove more conclusively the great urgency which exists for increased railway facilities, not only in the shape of extensions, but in reduced railway charges from the districts to the Port, than each of the several propositions advanced by the Railway Company in para. 7 of their letter.

The Chamber in its remarks on paras. 4, 5 and 6 of the letter under acknowledgment has dealt with the present yield of wheat in India and her capabilities of increased production. For all practical purposes, the account of the Indian wheat trade given by the Government of India, in paras. 153 to 194 of their Financial Statement, published in the *Gazette of India* on 17th March 1883, may be regarded as accurate and authentic. The present yield is there estimated at 6½ million tons, and it is stated that, under favourable conditions as to the prospects of a market, it would be possible within a few years to double the amount. In the Statement of Imports of Wheat into the United Kingdom, from all countries, given by the Railway Company in para. 21, it is shown that the total imports in 1881 amounted to 2,852,133 tons, and in 1882 to 3,208,581 tons. The Chamber, therefore, broadly asserts that India is capable of supplying not only the wants of the United Kingdom, but of producing an unlimited supply, that it is simply a question of finding a market for the producer, and that markets will be created by making branches of railways into the producing districts, and by cheapening railway communication with the coast. The figures given in para. 8 are quite capable of explanation; the exports of wheat in 1877, 1878, and 1879 having been very much restricted, on account of the famine in Southern India.

The Railway Company admit that the surplus of years of abundant harvests remain in the country, and it was, therefore, but natural that the high prices

Para. 8.

Para. 9.

then ruling in Europe should, even with present defective communications and high railway charges, have resulted in enormous exports in 1881 and 1882. From 291,112 tons in the first six months of 1882, however, the export dropped to 126,842 tons in the latter six months of that year. This fact, it appears to the Chamber, proves how impolitic it is on the part of the Company to maintain their present high rates. The export in the latter half of 1882, of 126,842 tons—no small export in itself—might have been greatly increased if the railway charge had been lowered to enable merchants to work to the reduced prices ruling at home. It is a trade axiom that low rates of carriage always tend to increase exports.

The Chamber regrets the misleading impressions created, and the erroneous results arrived at, by taking the rate from Jubbulpore as the basis of the G. I. P.

Paras. 10 and 11.

rates generally. It is true that Jubbulpore may be taken as the extreme lead of the grain traffic originating within the system worked by your Company, but it is the point of Junction with the East Indian line, and your Directors are aware that the rates from that point are the lowest on the G. I. P. line, being so fixed as to secure the traffic which would otherwise find its way to Calcutta. The table of rates from stations on the G. I. P. line to Bombay, given further on, will show how different is the rate from Jubbulpore to Bombay compared with the rates from other stations on the line to Bombay.

The Chamber desires now particularly to request the favour of your attention to the following remarks on the Railway Company's analysis of the cost of

Paras. 12, 13, 14, 15, 16, 17, 18.

production and transit charges on wheat contained in these paragraphs, as the accuracy of that analysis is the point, as justly observed by your Directors, to which the attention of all concerned in the development of the trade should be directed. The information as to cost of production has been obtained from high authority, and the charges from Jubbulpore until sold in London from merchants actually engaged in the trade. The charges, moreover, are given in detail, so that they may at any time be verified.

The Railway Company, in para. 12, quoting from the pamphlet already mentioned, assume that the prime cost at

which wheat can be raised in India in an unopened district such as Bilaspur is from 5s. 6d. to 6s. 6d. a quarter, and, in the following para., the price at Jubbulpore is taken at 22s. 4d. It will be apparent that if there was a railway to Bilaspur it would raise the value of land, the cost of living, the rate of wages, &c., so that the prime cost of cultivation would not remain at 5s. 6d. to 6s. 6d. a quarter, but would gradually rise to a level with the price at Jubbulpore. As a good deal of ignorance and misconception exist with regard to the cost of raising wheat in the interior, and of placing it on the railway, and as the Chamber deemed it advisable to procure accurate information on these points, it forwarded to the Chief Commissioner of the Central Provinces a copy of the letter addressed by the Railway Company to the Under-Secretary of State, and from his reply, dated 21st July 1883, the following extracts are taken :—

“ One of the principal grounds on which the G. I. P. R. decline to lower their grain rates is the very large margin of profit which is at present enjoyed by the Indian trader, that is to say, the very great difference between the cost of placing wheat in markets on the railway and the price at which it sells in these markets. The cost of placing wheat on the railway is sub-divided into (a) cost of production and (b) cost of carriage, and an estimate is given for each of these. The estimate for cost of production amounts to only 6s. 6d. per quarter, but this seems to be very much below the mark. The estimate appears to be solely founded on the fact that the average price of wheat in Bilaspur is between 5·7 and 6·6 shillings per quarter (= 10·4 to 10·7 annas per maund). The conclusion seems to be a quite untenable one. In the first place the price at which wheat exchanges for silver in the Bilaspur market is no safe guide to the cost of producing it in Bilaspur as compared with other districts. Silver is scarcer in Chattisgarh than in other parts of the provinces, and commands, therefore, a higher exchange rate. *And existing means of communication are not sufficient to carry away the annual surplus*, and there is therefore a keen competition to sell, especially at the times fixed for the payment of land revenue, when silver must be acquired somehow or other. In the second place, even assuming that 6s. 6d. represents the cost of placing a quarter of wheat in the Bilaspur market, it is obvious that this is no guide whatever to its cost in other

parts of the Provinces. The cost of production of wheat is the cost of growing it on the least productive soil which it pays to place under wheat, since the advantages of superior fertility are negated by the imposition of rent. In Bilaspur existing means of communication cannot carry away more than a certain amount of grain. It is therefore useless to produce more than this amount, and hence wheat is at present only grown on the most productive soils, and therefore at low cost. The only safe method of arriving at the cost of production of wheat is by calculating the cost of each individual process in wheat-growing. I annex a Note recently drawn up for the Government of India on estimates of the cost of wheat-growing. It will be seen that a careful comparison of the estimates leads to the conclusion that, taking rent into account, wheat cannot be grown in districts near the railway for much less than 14 annas a bushel, that is to say, this is the cost of growing it in the worst land which it pays to put under wheat : 14 annas a bushel comes to 11s. 8d. a quarter, very much in excess of 6s. 6d., on which the arguments of the G. I. P. Railway are founded." A copy of the Note on estimates of the cost of wheat production above referred to is appended hereto.

The items composing these estimates embrace, it will be observed, only the actual cost of the cultivation and production of wheat. They do not include interest on advances, and other incidental charges. It has generally been supposed that very heavy interest is paid on these advances, the money-lenders often advancing before the seed is sown, and taking the risk of the crops, and that this interest makes a considerable addition to the actual cost of production. The Chief Commissioner, however, thinks otherwise. His remarks on this point are as follows :—"The cultivators of these Provinces are as a rule sufficiently well off to avoid borrowing at exorbitant interest money to meet the expenses of cultivation, and the only part of their outlay for which they commonly resort to the village Malguzar or Bania is the seed grain. This is ordinarily lent at 25 per cent. interest, the cultivator being bound to return the grain at harvest time *plus* one-quarter more of its amount. If allowance be made for this interest, it will only increase the estimated cost of wheat production by between 4d. and 5d. a quarter." The Chamber is glad to have this assurance from the Chief Commissioner, for it proves how greatly the

condition of the cultivator has improved under the expansion of the wheat export trade.

And from a further communication from the Chief Commissioner to the Chamber, dated 12th September 1883, relative to the cost of carriage from the districts where the wheat is grown to the railway stations, the following extracts are taken :—" Enquiries have been made as to the average distance from which wheat is brought, and as to average rates of cartage ruling at the three important wheat marts of *Gadarwara* in the Narsingpur districts—*Harda* in the Hoshungabad district—(both on the G. I. P. R.), and *Nandgaon* in the Raipur district—the present terminus of the Nagpur and Chhattisgarh State Railway. It has been necessary to return the Narsingpur report for further enquiry, but it does not seem advisable to make on its account further delay in replying to you. The Deputy Commissioner of Raipur, who has made a very careful enquiry into the subject, states that the average distance from which wheat is carted to the Nandgaon station is 50 miles, and that the average rate of cartage is 3 annas 1½ pie per ton per mile. The Deputy Commissioner of Hoshungabad states that the average distance from which wheat is brought to Harda market is 25 miles, and that the average rate of cartage is 4 annas 6 pies. These figures give the average cost of carting a quarter of wheat to Nandgaon as 3s. 6d., and to Harda as 2s. 6d. It is probably not much below 3s. in any part of the Provinces.

" If the selling price of wheat on the line of rail be taken at 22s. 4d. per quarter, this estimate allows a margin of 7s. 8d. But it would appear that 22s. 4d. is too high a price to assume as the average. Between April 1 and July 1 of the current year the wholesale price of wheat in the Jubbulpore market is reported not to have risen above Rs. 2 per maund. This is equal to 20s. per quarter of 480 lbs. The margin of profit which remains, if the wheat be sold at this price, is only 5s. 4d. per quarter, which does not seem very extravagant, especially where, as is often the case, it is divided between two traders."

Recapitulating these facts, we find on the authority of the Chief Commissioner of the Central Provinces (who from his position is well entitled to give an authoritative opinion on the subject,) that instead of 9s. 9d., which is assumed by the Railway Company to be the cost of pro-

duction and delivery to the railway, the actual cost is 14s. 8d., and is made up as follows:—

Estimated cost of production in districts where grown...	s. d.
Carriage to Railway Station	11 8
	3 0
Cost of production and delivery to railway.....	14 8

The market price of wheat at Jubbulpore is assumed by the Railway Company to be 22s. 4d. per quarter, which would give a margin of 7s. 8d. per quarter. But the wholesale price of wheat at Jubbulpore is put down by the Chief Commissioner at Rs. 2 per maund, or 20s. per quarter of 480 lbs., which reduces the margin between the cost of production and delivery to the railway to 5s. 8d. per quarter.

The Chamber cannot believe that the Railway Company will regard this margin of profit as large, more especially when it is borne in mind that, in calculating it, no allowance is, as stated in the concluding sentences of the Note appended, made for any portion of the produce which the cultivator receives in return for the labour contributed by himself or by his family, and which should be credited to wages and not to profit, and when it is also remembered that the profit is generally divided between two traders. From the statement, moreover, made by the Chief Commissioner as to the general prosperity of the cultivators in the Central Provinces, it is obvious that the margin of profit principally goes to the cultivators, and not, as stated by the Chairman at the General Meeting of the Company held on the 15th of June last, to the extortionate middlemen of India, generally money-lenders, who intervene between the cultivator and the purchaser.

The Chamber has dwelt at some length upon the cost of placing wheat on the line of railway because it is the point on which, in the opinion of the Directors, the whole question turns, and because, in view of the margin of profit which they have erroneously put forward, they say that they cannot conceive it to be their duty to give up any part of the freight charge now earned. It was, therefore, important that the inaccuracies in their estimates of the cost of production should be corrected, although it seems to the Chamber that, in considering the effect which the railway freight charge has upon the export trade, the price of wheat at the railway station is of minor importance, inasmuch as it is regulated by the export demand, and that,

as no wheat is purchased by exporters in the interior, but only at the railway stations, the charges incurred by the exporter in transporting the wheat from the railway station to the European market have a more direct bearing on the trade.

Turning, then, to the analysis of these charges as given by the Railway Company in paragraph 15, we find that several important items have been omitted, which is the more to be regretted as accurate information might have been readily obtained by them either in India or in London, and the very small profits which, it is well known, are earned by the trade in ordinary times should have suggested inquiry. The charges given by the Railway Company are as follows:—

	Per quarter.
	s. d.
Price at Jubbulpore	22 4
Railway charge from Jubbulpore to Bombay at 10 annas	6 8
9 pies per maund	6 8
Ocean freight—Bombay to London at 35s. per ton of 16 cwt.	9 9
	38 9
Market price, London	44s. to 45s.

showing an apparent profit to the exporter of, say, 5s. 9d. per quarter. The charges, however, actually paid by the trade are very different, as will be seen from the following detailed statement, in which the price at Jubbulpore, the railway charge from Jubbulpore to Bombay, the ocean freight, and the market price in London, as given by the Railway Company, are, for the sake of comparison, accepted by the Chamber:—

	Per quarter.
	s. d.
Price at Jubbulpore	22 4'00
Up-country charges—	s. d.
Weighing	1'34
Brokerage	1'00
Godown rent	0'67
Telegrams and petties	0'67
Cartage from bazaar to godown	1 anna per bag. 2'74
on uncleared parcels	
Cartage from godown to station.	Rs. 8½ per 100 } 3'85
Hamalage of weighing and loading Rs. 2½ per 100 bags.	
Cleaning Rs. 3 per 100 bags	Rs. 8½ per 100 } 3'85
Twine for sewing Re. 1 per 100 bags	
Railway carriage on new bags	Rs. 2 per 100 bags
Rs. 2 per 100 bags	
Agency, working charge	1 per cent. 2'78
Discount on demand bills	1'41
Railway freight to Bombay	6 8'00
	7 10'46

					Per quarter.		
					s.	d.	s. d.
Shipping charges in Bombay	...	...	...	...	...	8	04
Wharfage	...	...	...	...	...	1	64
New Bagging	...	...	...	...	1	3	29
Freight to London	...	...	...	...	9	9	00
2 per cent. for loss in weight	...	...	...	...	...	11	10 08
Actual charges in London	...	...	...	...	...	2	00
					44		10 61
Market price, London	...	...	...	...	..44s. to 45s.		

This statement contains only actual charges paid by the exporter, commission or other items of profit being excluded. It shows no profit to the exporter, and forcibly illustrates the great difficulties with which the wheat export trade has, under the present illiberal policy of the G. I. P. Railway Company in maintaining high rates of carriage, to contend. Nothing could show more clearly the injury which that policy is inflicting on the wheat export trade and on the country. The Liverpool Chamber of Commerce rightly concluded that it only remained to be seen whether the carriage (in India) could be cheapened sufficiently, and the irregularity of supply overcome. The analysis shows how large an item of charge is the railway freight from Jubbulpore to Bombay. And it is apparent that if the railway rates were lowered it would enable the exporter to work to reduced prices in London, and would, more than any other circumstance, encourage a regular flow of wheat from India to Europe.

It is hardly necessary to reiterate the axiom, which experience everywhere has proved to be true, and which is perhaps more particularly applicable to India than to any other country, that if rates were lowered more wheat would be exported. This again would result in the augmentation of the land revenue, and in promoting the prosperity not only of the country generally, but of the Railway Company. More land would be brought under cultivation; the condition of the ryots improved; while, under the stimulus given to the import trade, return traffic, which is now very limited, would be greatly increased. Everything depends on the cost of carriage. Goods for Delhi are now sent cheaper by steamer to Kurrachee and the Sind, Punjaub and Delhi line, than by the B. B. and C. I. or by the G. I. P. lines as formerly. Iron, again, goes in large quantities direct to Kurrachee for transmis-

Para. 19.

sion by the Sind, Punjab and Delhi line to Delhi, instead of coming to Bombay as it used to do. The effect of low rates in increasing exports, and more regular supplies, was brought by the Chamber to the notice of the Railway Company in its letter of 19th April last, and the Chamber deems it advisable to repeat the comparative tables of rates then given and the effects of those rates on exports. The tables showed comparatively the grain rates from stations on the G. I. P. Railway to Bombay, and the through rates to Bombay *via* Delhi by the Rajputana-Malwa and B. B. and C. I. Railways, and the through rates to Kurrachee *via* Lahore by the Indus Valley, Punjab Northern, and Sind, Punjab and Delhi Railways, and were as follows :—

COMPARATIVE TABLES.

G. I. P. Local Rates. From Stations to Bombay.			Through Rates to Bombay <i>via</i> Delhi by Rajputana-Malwa and B. B. & C. I. Railways.			Through Rates to Kurrachee <i>via</i> Lahore by Indus Valley, Punjab Northern, and Sind, Punjab and Delhi Railways.		
Mileage.	Stations.	Rate per ton per mile at 27 1/2 mounds to a ton.	Mileage.	Stations.	Rate per ton per mile.	Mileage.	Stations.	Rate per ton per mile.
		Pies.			Pies.			Pies.
341	Khangaum ..	9 1/2	838	Delhi	4 95	1,169	Delhi	4 68
363	Akola ..	9 00	927	Meerut	5 13	1,129	Meerut	4 70
417	Hurda	7 31	1,053	Umballa	5 37	1,003	Umballa	4 72
443	Sewneo	7 25	1,119	Ludiana	5 42	937	Ludiana	4 80
494	Sohagpore	7 11	1,203	Umritsur	5 52	853	Umritsur	4 79
520	Nagpore	6 28	1,235	Lahore	5 57	821	Lahore	4 87
554	Kareli	6 31	1,409	Rawul Pindee	5 81	995	Rawul Pindee	4 84
616	Jubbulpore ..	5 70	1,472	Attock	5 84	1,058	Attock	4 86
			1,516	Peshawur	5 83	1,102	Peshawur	5 26

The striking contrast in these tables between the low through rates per ton per mile from the stations in Upper India to Bombay and Kurrachee, and the high rates charged by the G. I. P. Railway from the stations in the Central Provinces to Bombay, is at once apparent. And it is important that the attention of your Board should be specially directed to the effect of the low through rates *via* Lahore to Kurrachee in the extraordinary increase in the

export of wheat from that port, as shown in the Accounts relating to the Trade and Navigation of British India, published by the Government of India, from which the following extracts for the last five years are taken:—

WHEAT EXPORTED FROM SINDH.

			Cwts.
In the 12 months ending 31st March 1879		.....	22,357
Ditto	ditto	1880	274,764
Ditto	ditto	1881	169,465
Ditto	ditto	1882	1,862,334
Ditto	ditto	1883	2,739,633

while for the five months ending 31st August 1883 the quantity exported from Kurrachee amounted to the large total of 2,420,633 cwts.

In the same letter of the 19th April last it was stated that, in the list of the through rates to Bombay *via* Delhi by the Rajputana-Malwa and B. B. and C. I Railways, a reduction of the then rate of thirteen annas and six pies per maund from Delhi to Bombay to eleven annas for wheat, other stations being treated proportionally, was to take effect from the 1st of May. The reduction has already resulted in a large increase of traffic, as will be seen from the following comparative statement showing the quantity of wheat received at Bombay by the Rajputana-Malwa Railway *via* Sabarmutti (through traffic), in the months of May, June, July, and August, in the last three years:—

	Cwts. 1883.	Cwts. 1882.	Cwts. 1881.
May	196,768	35,864	54,762
June.....	396,014	97,113	33,265
July*	86,105	60,871	9,606
August.....	363,991	44,369	8,033

Nothing could prove more conclusively than these figures the truth of the general proposition that reduced rates are invariably followed by increased exports.

With regard to the concluding sentence of this para., in which the Railway Company say that the grain rates are on the average not more than 6 pies per ton per mile, I am directed to request your attention to the table of rates given above in which you will find that the rate from Jubbulpore to Bombay is 5.70 pies per ton per mile, and

* The traffic was entirely stopped for the greater portion of the month owing to breakage of line.

that the rates from all the other stations to Bombay range between 6'28 and 9'42 pies per ton per mile.

The Railway Company furnish a statement of imports of wheat into the United Kingdom, which, they say, illustrates both the irregularity of supply and the ready response which India, with all her disadvantages of internal transport, can make to any real demand for her products. The Chamber believes that this irregularity is chiefly due to the present high rates charged by the Railway Company, and that if the rates were considerably reduced, and the trade could thereby lay down wheat at lower prices in Europe, the supplies would become more regular.

The Chamber agrees with the Railway Company in the views which they have expressed regarding the necessity of a much more rapid development of Indian railway communications than at present exists. Experience has already shown that a guarantee in some form is necessary to attract the enterprise and capital of England to the extension of the railway system in India. It appears to the Chamber that a limited guarantee is admirably suited for India, and that without it much cannot be expected in the way of establishing additional railways in India.

The Chamber begs now to submit its views on the statement in the concluding portion of your letter of the 4th of June last, that wheat and other grain had, during the past few weeks, been offered at the stations of the Company, for transport to Bombay, in quantities beyond the engine-power at your command to move without some detention, and you are pleased to add that, with the authority of Government, orders are now at home for 60 additional engines, some of which are expected to arrive very shortly. And the Chairman, in his speech at the half-yearly General Meeting of the shareholders held on the 15th of June last, said—"The Traffic Manager reports to the Board that the line was absolutely blocked; that there were upwards of 250,000 bags of wheat upon the line, which he had not engine-power to remove." Again he says—"So far back as 1881 they applied over and over again for more engines. They found that they had not enough to carry the expected traffic. After long applying

for 50 engines they only got sanction to make 10 or 12. The Board had recently applied for 123 more engines, and after long delays they got sanction for 50 more, and they will not be ready for a year and a half." And at page 15 he adds—"If we get the number of engines which have been declared to be sufficient, their cost and that of shedding, workshops, and so forth, would require fully half a million more of capital to enable us to carry the grain traffic as it exists at present." The Chamber, moreover, understands that over 100 engines, in fact more than 25 per cent. of the Company's whole stock, were being repaired in the workshops in the month of May. Though making all due allowances, the Chamber cannot believe that if the Locomotive Department had thoroughly devoted their energies to providing the Traffic Manager with the necessary engine-power they could not by careful management have reduced in the month of May, the busiest period of the year, the quantity for which repairs were necessary, and arranged that the greater part of the work should be carried through in the slack season of the year. The accounts could easily be arranged to debit both half-years with their fair share. And among the complaints made to the Chamber one of the leading firms in the wheat trade write that their purchases in the interior were not nearly so large in the past season as they had anticipated, owing to the unsatisfactory working of the G. I. P. Railway Company's line, as during the height of the wheat season they were obliged to stop purchases against orders, "so as not to have unduly large stocks lying exposed at the railway stations, whence they could not be transported by the Railway Company, owing to want of wagons and other causes. Had these forced stoppages not occurred, their total purchases of wheat this season would have been far greater." It is impossible to adequately describe the indignation of the mercantile community at the culpable remissness and indifference to the interests of India of those who are responsible for the existence of such a state of things. The Company have virtually a monopoly of the whole of the carrying trade of Western India from Jubbulpore and the Central Provinces to the Port, and it is hardly conceivable that after upwards of 23 millions sterling have been expended upon the line it should be rendered inefficient, and a trade of great imperial importance impeded and kept down, and its development restricted, by hesita-

tion and delay in furnishing the Railway with rolling-stock sufficient to carry the grain traffic as it at present exists, to say nothing of the vastly increased proportions which that traffic would, with proper and adequate facilities, acquire. Deficiency of rolling-stock, however, is not the only drawback to the efficiency of the G. I. P. line. It is a well-known fact that until the doubling of the line from Bhosawul to Nagpore is completed the working power of the Company, even with a sufficiency of rolling-stock, will never prove equal to the grain trade of the Central Provinces. The Chamber considers that it is the bounden duty of the Company to incessantly urge the Government of India and the Secretary of State for India, in every possible way, to sanction this work, and the provision of such additional rolling-stock as will be amply sufficient not only for the present but for the increased grain traffic which may be expected hereafter. The excellent * quality of Indian wheat, which is year by year becoming better known and appreciated in Europe, the great and rapid expansion of the trade, and the undoubted fact that India could, with proper and adequate railway facilities, supply the whole of the wheat required by England, as well as a large quantity of that required by the Continent, will doubtless induce the Government of India and the Secretary of State to give a ready and willing response to any urgent and earnest representations which the Railway Company may now make for the doubling of the line wherever necessary, and for thoroughly equipping it with rolling-stock equal to the heaviest grain traffic expected. At present incalculable injury is being done to the wheat trade and to the country by the defective working power of the Company. It is, moreover, greatly to be regretted that the deficiencies of the Company should be used as a pretext for maintaining grain rates unnecessarily high, and thus inflicting further injury on the trade. The Chairman concluded his speech on the 15th June last with the following remarks :—" All I can repeat is that in the face of the fact that the line is choked with grain, and that we cannot carry the grain that is there for us to carry, to say that we should reduce our rates seems to us to be irrational." That these rates are unnecessarily high is proved by the large profits earned

* *Vide* Report on Indian Wheat by Messrs. MacDougall Brothers to the Secretary of State for India, dated 15th December, 1882, presented to both Houses of Parliament.

by the Company during the half-year ending 30th June last. The net profit, it is reported, amounted to a much larger sum than was ever previously earned by the Company, admitting, it is said, of a dividend at the rate of 5 per cent. for the half-year, or of 10 per cent. for the year, being paid, and it was principally derived from the wheat trade, while the condition of the trade itself was far from flourishing.

In conclusion, the Chamber, in adverting again to the circumstance that the G. I. P. line, as now constructed and furnished with rolling-stock, is totally unequal to the wheat traffic, desires most earnestly to urge that the doubling of the line from Bhosawul to Nagpore, and wherever else necessary, be immediately proceeded with, and that whatever additional rolling-stock may be necessary to cope not only with the present but with the greatly increased wheat traffic which may reasonably be expected hereafter, be ordered and supplied as soon as practicable, and that these works be at once carried out in order that the trade may derive the earliest and fullest possible benefit from the important and most desirable schemes of extension which have been brought forward. And the Chamber trusts that while the line is thus being put into a state of thorough efficiency, the Company will now and hereafter abandon their present illiberal policy, by granting such facilities as they can to the wheat trade, by abolishing every restriction on small consignments, and reducing their rates to a point which will enable the trade to compete with other countries, and so ensure a larger and more regular export in future.—I have, &c.,

JAMES THORBURN, Chairman.
J. GORDON, Secretary.

NOTE.

Mr. Buck quotes three estimates of the cost of producing an acre of wheat. One is taken from a report on wheat cultivation prepared in November 1881 by the Director of the North-Western Provinces Agricultural Department; the second from a series of papers on the "Field and Garden Crops of the North-Western Provinces and Oudh," issued by the same Department in 1882; and the third from Mr. C. A. Elliott's Report on the Settlement of the Hoshangabad District.

These estimates are in some respects not strictly comparable one with another. The first of the number is based on figures given in

the Report on the Cawnpore Experimental Farm for the Rabi season of 1880, and represents what was actually found to be the cost of growing an acre of wheat on the farm with hired labour. The second was prepared after careful collection of all available data in Settlement Reports, Farm Reports and elsewhere, and indicates the *estimated* cost to a cultivator of growing an acre of wheat with *hired labour*, that is to say, supposing that he keeps no bullocks of his own and contributes no part of the labor himself or by his family. The third estimate represents the *actual* cost to a cultivator of growing an acre of wheat in the Hoshangabad district as discovered by local enquiry.

The three estimates are compared item by item below :—

	Cawnpore Farm, 1879-80.	Field and Garden Crops, 1882.	Hoshangabad Settlement Report.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Seeds	2 0 0 (80 lbs.)	3 0 0 (100 lbs.)	2 8 0
Ploughing	1 4 0 (once with English Plough.)	6 0 0 (8 times.)	7 9 11 (7 times)
Clod-crushing	0 10 0	0 8 0	Nil.
Sowing	1 2 0	0 14 0	0 1 7
Weeding	1 15 3	0 12 0	Nil.
Watching	Nil.	Nil.	0 1 0
Reaping	1 9 0	1 8 0	0 10 0
Threshing	...	3 0 0 (for a crop of 20 mds.)	...
Cleaning	...	0 6 0 (ditto)	Nil.
Fees to village servants	...	...	0 13 9
<i>Total excluding manure, irrigation and rent</i>	8 8 3	16 0 0	11 12 3
Manure	Nil.	3 0 0 (100 mds.)	Nil.
Irrigation	3 12 0 (twice.)	5 7 0 (3 times.)	Nil.
Rent	6 4 0	7 0 0	1 8 0
Grand Total.. ..	18 8 3	31 7 0	13 4 3

Comparing first of all the first two of these estimates with one another, it is necessary to make allowances for certain special conditions which attended the Cawnpore Farm cultivation of 1879-80. The seed was sown thinner than is usual, and its cost is therefore reduced. The land was in good order, and was only ploughed once with the English plough, instead of eight to ten times as is usual with native cultivators. On the other hand, possibly from this reason, there was a very heavy growth of weeds during the cold-weather months, and the charges for weeding were unusually high. No allowance was made for threshing and cleaning, and, taking the out-turn as 15 maunds of grain, at least Rs. 2-8-0 must be added to the estimate on this account. The land was not manured during the season of cultivation, but it had been manured in the previous year, and to be comparable with the other the estimate must be raised by at least Re. 1-8-0 on account of the unexhausted value of

this manure. Irrigating charges were lower than usual, since, owing to deep cultivation, two waterings were found sufficient. On the other hand, the rent rate is abnormally high, since the land was situated in the vicinity of Cawnpore, and had been previously in the occupation of Kachi cultivators, who were heavily rack-rented. Raising the estimate by Rs. 4-0-0, to allow for the cost of threshing and cleaning and for the unhausted value of the previous year's manuring, its total becomes Rs. 22-8-3.

The second estimate represents the cost of producing an acre of wheat by means usually followed by native cultivators in the Ganges-Jumna Doab, if all the labour be hired. It may be noted that an expenditure on this scale is expected to yield an exceedingly good crop, and the out-turn which should be anticipated is given as 20 maunds grain, which is much above the average in native cultivation, and 25 per cent. in excess of the average produce gathered in 1880 on the Cawnpore Farm.

The Hoshangabad figures represent the actual cost of wheat cultivation to a cultivator who keeps his own bullocks. The total is much below that of the preceding two estimates, principally because it includes no charges on account of manure and irrigation, and because the rent rate is very much lower.

Before a fair comparison can be instituted between these estimates, it is necessary to consider the amount of the produce which is contemplated by them. The actual average out-turn of wheat per acre on the Cawnpore Farm in 1879-80 was 15 maunds, which may therefore be taken as the produce on the first estimate. It has been already stated that the second estimate contemplates an out-turn of 20 maunds grain. Mr. Elliot's rate of produce given is 30 *kurus* (=600 lbs.) grain, but this is below what is now accepted as the average for the Hoshangabad district, and should, I think, be raised to between 700 and 800 lbs. The outturn which should be expected on each of the estimates may therefore be put at 20 bushels (=1,200 lbs. or 15 maunds), 26·6 bushels (=1,600 lbs. or 20 maunds), and 12 bushels (=720 lbs. or 9 maunds).

The rent rate may be taken as indicating the measure by which the productiveness of the particular land in question exceeds that of the worst land which it pay to place under wheat. If, therefore, these figures be fairly correct, the cost of raising a bushel of wheat *including rent* should be very nearly the same on all three estimates, but should differ very greatly if rent be excluded.

The total of the three estimates, including and excluding rent, will be (in annas) as noted below :—

	Cawnpore Farm, 1879-80.	Field and Gar- den Crop, 1882.	Hoshangabad Set- tlement Report.
	As,	As.	As.
Including rent	360	391	188
Excluding rent	260	503	212

The value of the straw may first of all be conveniently deducted from this. A comparison of a large number of *data* shows that the value of the straw may be fairly appraised at about $\frac{1}{4}$ of the value of the grain. If the harvest price of the grain be assumed to be 25 seers per rupee, the figures will then stand as below :—

	As.	As.	As.
Including rent ...	264	263	140
Excluding rent ...	164	375	164

The cost of producing a bushel (=60 lbs.) of wheat on each of the three estimates will be then as follows :—

	Cawnpore Farm, 1879-80. (At 20 bushels.)	Field & Gar. Crops, 1882. (At 26½ bushels.)	Hoshangabad Settlement Report. (At 12 bushels.)
	As.	As.	As.
Excluding rent	8·2	9·8	11·7
Including rent	13·2	14·1	13·6

These figures would therefore appear to show that, *excluding rent*, wheat can be grown much more profitably in the alluvial well-irrigated soil of the Ganges-Jumna Doab than in the black soil of the Nerbudda valley. So far, however, as the cultivator is concerned, the cost of production is much the same in both cases, since greater fertility is counter-balanced by higher rent rates. The actual cost of producing a bushel of wheat may therefore be taken as between 13 and 14 annas, which is equal to 18 annas a maund. The difference between this and the selling price is the measure of the cultivator's profit. Should the harvest price, for instance, be 25 seers per rupee, his profit on each maund of wheat would be $(25\cdot6 - 18 =) 7\cdot6$ annas. His total profit per acre would depend of course on the gross out-turn, and would be far larger in the highly cultivated fields of the North-Western Provinces than on the less productive soil of the Nerbudda valley. The Cawnpore Farm out-turn of 15 maunds per acre would yield a profit of Rs. 7·2, while that of 9 maunds gathered at Hoshangabad would only yield a profit of Rs. 4·4. In order to earn the same profit, it is evident, therefore, that the holdings must be of much larger size in the one case than the other, and this deduction is exactly borne out by the facts. The average size of the holdings in the North-Western Provinces, Bundelkhand districts, in which black cotton soil prevails, is double that of those in the adjacent districts of the Ganges-Jumna Doab. In the Nerbudda valley it runs as high as from 20 to 25 acres, but this is due to sparseness of population as well as to the intrinsic character of the soil, and furnishes a sufficient reason for the comparatively great prosperity of the cultivating classes in this tract. It should be added that in calculating the cultivator's profit per acre no allowance has been made for any portion of the produce which he receives in return for the labour contributed by himself or by his family. This of course should be credited to wages and not to profit.

J. B. FULLER,

Offg. Director of Agriculture, C. Provinces.

30th April, 1883.

APPENDIX D.

THE INDIAN WHEAT TRADE.

PAMPHLET PUBLISHED AT CALCUTTA ENTITLED "THE INFLUENCE OF ENGLISH TRADE AND AMERICAN PROTECTION BY THE DEVELOPMENT OF INDIA."

The respite which the commercial public in England is now enjoying from the late cry for "Fair Trade," about which so much was written a year ago, should not make us forgetful of the fact that, mistaken as the cry was, the real evils that lay at the bottom of the discussion are still as far as ever from being removed.

The manufacturer, whose interests are so materially affected by the heavy duties imposed by foreign countries on English manufactured goods, naturally agitates to get those duties removed; the simplest and the most direct course occurring to him being "Reciprocity," *i.e.*, to exclude those nations that exclude us, or, in other words, to select the articles exported by our rivals that compete most successfully with our own products to be the victims of a retaliatory policy.

But, although the remedy proposed may be altogether wrong; although it may be impossible for the public in England to acquiesce in a policy,—the practical effect of which would simply be to bring enormous losses on themselves in the hope of inflicting still greater losses on their rivals,—we may still agree with the manufacturer in thinking that foreign protection is in itself a great evil that should, if possible by fair and proper means, be done away with. I therefore now propose to enquire whether there is no other and better means than retaliation of relieving the evil complained of; whether there is no way, strictly consonant with every canon of political economy, of showing those countries which adhere to false principles and a bad policy, the utter wastefulness a system of protection entails on themselves as well as on the rest of the world in general.

There can be no doubt that the demand for "Fair Trade" was, to a great extent, stimulated by the heavy protection duties imposed on English manufactured goods by the United States of America shortly after the termination of the Civil War. The import tariff now existing may be said, especially as regards the English iron trade, to be almost prohibitory. It certainly is such as to give manufacturers a fair ground for complaint; in so far that a material reduction of the duty would doubtless lead to a large increase in the amount of English goods consumed in America.

Now, as regards this vast country, the United States of America, I have often wondered that writers on "Fair Trade" never saw to how great an extent the remedy is in our own hands. It would, I think, be easy to bring this country to her senses as to the advantages of free trade, by thoroughly opening the eyes of the Western farmers

to the price they are now paying for the protective policy imposed in the interests of the Eastern States.

At present, the chief exports from America to England that affect the farming interests are wheat and Indian corn. The importance of this trade to America may be judged by the fact that in the year 1881 England imported from America no less than 36,038,074 cwt. of wheat alone, at a cost of about £20,055,066 ; and it is evident that, if this grain could be obtained from any other source, where it can be grown at a lesser cost of production, American traders would, to a great extent, be excluded from the English markets unless they consented to a reduction of price so material as to force upon the whole American farming interest the consideration of the most obvious means of lessening the cost of production.

The wheat trade of England now oscillates between the three countries of America, Russia, and India, swaying from one country to the other on the slightest fluctuation in price. As wheat can be produced in India at a prime cost, with which the American farmer cannot compete, my object is now to show that, by properly developing the communications of India, we should be enabled to establish such a preponderance in favour of India that the American trade, in order to hold its own, would have to submit to sacrifices that would tend to a complete re-opening in that country of the whole question of free trade.

This fact seems to be at last clearly seen by the Press in both countries. The *North Western Miller*, published at Minneapolis, on the 15th October 1882, says :—

“ Not long ago we referred to the growing importance of British India as a wheat-producing country. It is doubtful, however, if Americans appreciate the gigantic possibilities of this new competitor in furnishing the wheat supply of the world, or Europeans the possible magnitude of the stores they may eventually draw from that source.”

Almost at the same date, the editor of one of the Bombay papers, was writing to much the same effect. To quote from an article in the *Times of India* of the 6th October 1882 :—

“ We do not doubt India's ability to compete with America, even though the latter has bumper crops ; but it is essential that every charge be reduced to a minimum.”

The advantages to India, and the effect on its general prosperity, that would result from the diversion of the greater part of the English wheat trade to India, it is almost difficult to exaggerate. The amount of money annually paid by England for imported grain would, if flung into India, give an extraordinary stimulus to agriculture. Production would be multiplied at improved wages ; there would be a more assured return for labour and a steadier rate of progress with fewer breaks on account of scarcity. The receipt of this large sum yearly from England would tend more than anything else to raise the Indian ryot above his present abject state of poverty : while the encouragement directly given to increase the area of cultivation under food-grains would render the country far better prepared to meet the demands of famine. Added to which, a large increased export trade

is the very thing required to slightly re-establish the value of the rupee, and to prevent a further fall in Exchange with all its disastrous effects on the finances of India.

The poverty of the Indian ryot, it cannot be too often repeated, depends essentially on his having no market for the surplus produce of his land. The agricultural communities in Australia, in New Zealand, and in America subsist in substantial comfort on the profits of their field produce; and there is no *prima facie* reason why the ryot in India (at least in all the districts in which he holds his land direct from Government, and is not liable to be rack-rented by a native zemindar,) should not do the same were the markets of the world equally open to him. The chief cause of the poverty of the Indian ryot is not only preventible, but also within the power of Government to remove within a measurable time.

Nor would the gain to England be much less. The price of wheat in England, if not reduced, would remain steadier at its present favourable quotations. If English iron-masters, instead of anxiously watching the probable requirements of America in excess of the ability of the local iron-works to supply, were to turn their attention to the requirements of India, they would find there a field for the consumption of iron for railway purposes beyond their most sanguine expectation. Were the cotton manufacturers to unite in bringing pressure on the Indian Government at home to develop the country in a manner commensurate with its greatness, they would find that, with the increase of wealth, there would be a corresponding increase in the wants of the people. The large exports of wheat would, to a great extent, be balanced by imports of cotton fabrics from the Manchester Mills.

As I do not ask my readers to take the above statements upon trust, I will adduce briefly some of the facts that have led me to this conviction.

That India does already raise all the wheat required by England need not be doubted for an instant. From an official report, drawn out by Dr. Forbes Watson, and presented to both Houses of Parliament in the year 1879, it appears that the total production of wheat in India is now not less than 40 million quarters: the average annual import of wheat into the United Kingdom being only about 11 million quarters. The local consumption of wheat in India is not large, the bulk of the inhabitants subsisting on cheaper staples; and it thus appears well within the limit of probability that India *could* supply, were proper facilities given, the whole home demand.

The area of cultivation, as given in Dr. Watson's report, is probably rather over-estimated, and the Government of India, in a later estimate, came to the conclusion that the present area of wheat cultivation was about 19,329,200 acres,* yielding on an average from 8 to 13½ bushels an acre, or about 26½ million quarters, that is, 15½ million quarters in excess of the whole requirements of England. At the same time, the average yield per acre assumed in this estimate, 8 to 13½ bushels, is nothing compared with the yield that would be produced under a proper system of farming, the average yield per acre in

* Selections from the records of the Government of India in the Home, Revenue and Agricultural Department, No. CLX., page 16.

other countries being not less than 28 to 32 bushels.* Experiments carried on in the Government farms have proved that irrigation with a proper system of manuring more than trebles the average Indian yield †; and there can hardly be a doubt that farming in India would improve all along the line directly it became the interest of the Indian peasant to materially increase his production.

Altogether, the amount of the wheat production of India given by Dr. Forbes Watson is probably not far from the mark, as an estimate of the amount of wheat the country is capable of producing were sufficient inducement offered to bring under a proper system of cultivation the whole of the wheat-producing area of India. At the present moment, in the Punjab alone, independent of the area now under cultivation, there are 9,182,000‡ acres of culturable waste, the property of Government, not to mention enormous tracks in Central India and Burmah, all admirably suited for wheat cultivation, and all needing only irrigation and population to bring them under the plough.

From an outside point of view, the amount of wheat held in India must indeed be vast, when, even with our present defective communications, the export wheat trade of India can rise from 2,195,550 cwts. in 1880 to 7,444,449 cwts. in 1881, and again to 19,863,520 cwts. in 1882, or more than one-half of England's total imports of wheat from America in the year 1881, and this without any appreciable rise in the price of wheat in the country.

As regards the quality of the grain produced in India, it will probably be sufficient for me to quote an extract from Dr. Watson's reports:—

“We often hear of the ignorance of the Indian ryots, and of their careless and shiftless modes of cultivation. But a glance at the collection of Indian wheats under report proves that there must exist all over India a numerous class of agriculturists to whom such a reproach cannot apply. It is impossible to avoid the conclusion that the ryots who grew those samples of soft wheat equal to the finest Australian, or of hard wheat equal to the finest Kubanka, must be as keenly alive to the advantages of selection of seed and of careful cultivation as the most intelligent English farmer, and our samples prove that such ryots are to be found in almost every wheat-growing district.”

The fact is that Indian flour, as taking up more water, is rather a favorite with the English baker—a fact very practically shown by the following extract from the *British Trade Journal* for January 1st, 1883:—

“Only the other day, a well-known miller said he used 50 per cent. of No. 2 Club Calcutta, 40 per cent. of red winter American, and 10 per cent. of good Dantzic wheat in his business. Certainly we cannot submit this as a typical case, but we feel convinced that, all things equal, the prevailing

* Selections from the records of the Government of India in the Home, Revenue and Agricultural Department, No. CLX., page 24.

† The *Indian Agriculturist* for December 1st, 1876.

‡ Selections from the records of the Government of India in the Home, Revenue, and Agricultural Department, No. CLX., page 18.

disposition on the Continent of Europe is to give the preference to Continental and Indian grown wheat."

† And already a small export of wheat has begun from India to Australia, the Indian wheat being found superior as seed to the English, as better acclimatized for a hot country.

It can as easily be shown that India is more than able to compete with America as regards the prime cost at which wheat can be raised and put into the market. From an American agricultural newspaper,* I gather that on the Dakota prairies, including breaking \$3'00, and back-setting \$1'75 the first year, and seed-sowing, harvesting, and threshing the second year, the total cost of producing the first crop of about 22 bushels per acre is nearly \$13'00, equivalent to 19'7 shillings per quarter. After the first crop, the cost of producing an average crop of about 22 bushels an acre is estimated at from \$8 to \$9, equivalent to about 12'15 or 13'67 shillings a quarter.

Comparing this with the prices of wheat in the unopened districts of India, wheat usually sells in the Bilaspur district in the Central Provinces, only about 400 miles as the crow flies from Calcutta, at the rate of [60 to 70 seers the rupee,] 5'7 to 6'6 shillings per quarter. This too is the retail rate, and includes the not inconsiderable profits of the native corndealer; so that the prime cost at which wheat is raised in India cannot be more than about 5 to 6 shillings a quarter.

Between the years 1870 and 1876, the price of wheat at Chicago, 960 miles from the seaboard, fluctuated [77 and 158 cents per bushel,] from 23'72 to 52'80 shillings per quarter. Against this, the retail prices in India at stations connected by Railway with the sea-coast fluctuated during the same period, at Cawnpore 684 miles from Calcutta, [15'50 to 25'13 seers per rupee,] from 16'01 to 25'93 shillings per quarter; at Ludiana, 937 miles from Kurrachee, from 15'38 to 24'98 shillings; and at Jubbulpore, 616 miles from Bombay, at from 14'97 to 26'79 shillings.‡ The present rates at these three places—Cawnpore, Ludiana, and Jubbulpore (January 1883)—are, respectively, [18, 26, and 18 seers per rupee,] or 22'32, 15'45, and 22'32 shillings per quarter, as compared with the present rate (98½ cents per bushel) of 32'91 shillings per quarter in Chicago.

Summing up these facts, it would appear that wheat can be raised at Bilaspur, in India, at from 5 to 6 shillings a quarter against from 12 to 13 shillings at Dakota in America; and that the retail prices of wheat at the principal trade centres connected by rail with the sea-

* The North-Western Miller for October 25th, 1882.

† To prevent misunderstanding, I may here say that, throughout this paper, the dollar has been assumed as equal to £0'20548; the rupee as 1s. 8d.; the English quarter as 496 lbs.; the American bushel of wheat as 61 lbs.; and the Indian maund as 82'2857 lbs. Avoir.

‡ From the return of the prices of food-grains compiled by the Financial Department of the Government of India, it appears that from the year 1861 to the year 1876, the lowest annual average price of wheat at Raipur in the Central Provinces was 83 seers per rupee; the highest 15'00 seers. The *Agricultural Gazette* for August 1st, 1876, says: "The average retail price at Raipur was 60 seers, or 6s. 8d. per quarter, while at Bilaspur positively 81 seers, or about 4s. 10d. per quarter."

§ Prices of food-grains compiled by the Financial Department of the Government of India.

|| *Gazette of India.*

board, even in the most unfavourable years, are little more in India than the price of wheat in America, when it touches its lowest quotations. Comparing the prices at the same periods, they compare at about 15 shillings per quarter in India as against 24 shillings in America.

Nor even as regards ocean-steamer freight is India so unfavourably situated as appears to be generally supposed. The freight from San Francisco is, on the average, considerably higher than that from either Calcutta, Bombay or Kurrachee; and it is to be remembered that of the 36,038,074 cwt. imported into England in the year 1881 no less than 11,241,523 cwt. came from the Pacific. To the extent of the whole Pacific trade, that is, to the extent of about one-third of the whole American imports into England, the superiority of India as a source of supply is undoubted.

According to my latest quotation (December 6th), the freights from New York to London may be taken at from 7d. to 7½d. per bushel, equivalent to from 4·7 to 5·1 shillings per quarter. At the same date, the freights from Calcutta were about 35 shillings per ton of 20 cwt., equivalent to 7·75 shillings per quarter, and those from Kurrachee 25 shillings per ton of 18 cwt. equivalent to 6·15 shillings per quarter. So that, at the present date, the excess freight from Calcutta amounts only to from 2½ to 3 shillings per quarter; the difference against Kurrachee not being more than a shilling to eighteen pence. Even taking the average freights from Calcutta, Bombay, and Kurrachee at 45, 30, and 35 shillings per ton, the freight per quarter may be taken at 10·03, 7·38, and 8·6 shillings per quarter; or about 5, 2½, and 3½ shillings to the disadvantage of the Indian trade. In all three cases, and more especially as regards Bombay and Kurrachee, these excess freights nothing like balance the greater saving in the prime cost in India.

Thus, whether the question be viewed from the point of area, of quality, or of price, it appears that, after making the fairest allowance for the disadvantages against her in the matter of ocean-freight, India should be the principal source of supply for the wheat demand of England.

It will now probably be asked why, with these unquestionable advantages, India has not, in the ordinary course of supply and demand, attracted more of the English wheat trade,—why it has not, in fact, monopolized the whole of it. The answer to this question is a very simple one. The Americans have developed *cheap* lines of communication, while in India these have been studiously neglected. While America boldly pushes forward her railways into the absolute wilderness in hope of attracting population to cultivate the land, the Home Government of India appear too timid to give districts teeming with people the means of carrying off their almost too abundant surplus produce.

To bring into the open markets of the world the wealth of the agricultural produce of India, all that is required is *cheap* communications between the interior districts and the coast; and it is in this respect that India is so immeasurably behind her rival. In respect to cheap communication, it is not too much to say that at the present rate of

progress India is already about a century behind America ; and every day it is getting still further behind.

In America, the growth of the railway system has been immense : the following figures alone hardly give one an adequate idea of the progress made, for few people form true conceptions from mere figures. They will, however, give some rough impression :—In America,

In 1830 there were 23 miles of opened Railway.

„ 1840	„	2,818	„	„
„ 1850	„	9,021	„	„
„ 1860	„	30,635	„	„
„ 1870	„	53,399	„	„
„ 1880	„	93,671*	„	„

At the present date there are not less than 105,000 miles of railway opened in America, while a year ago, the Philadelphia Correspondent of *The Times* telegraphed that, during the year 1882, no less than 18,000 miles of new line were projected at an outlay of fully £90,000,000.†

Against all this it is almost ludicrous to contrast the puny efforts of a Government ruling 255 millions of people. In India, at corresponding dates—

In 1830 there were no Railways open.

„ 1840	„	„	„	„
„ 1850	„	„	„	„
„ 1860	„	836	„ miles of opened Railway.	„
„ 1870	„	4,833	„	„
‡ „ 1880	„	9,875	„	„

The number of miles that the Government of India have been able to construct in 27 years, from 1853 to 1880, represent about as many miles as are opened in America in one year, the mileage opened in the United States during the year 1880 having been as much as 8,890 miles. The Indian Railways, taken as a whole, are scarcely a patch on the vast system of lines that traverse the United States in every direction, bringing the products of each districts into easy communication with the Coast.

It is almost impossible to exaggerate the difference this makes to the social status of the agricultural population in the two countries. To the American farmer, the whole of the markets of Europe are open for the sale of the grain and other farm-produce not required for home consumption, while to the Indian ryot in the more neglected districts no calamity can well be greater than a bumper harvest, when the price of his grain falls to an almost nominal sum, when the greater part of the crop has to be either left standing or else buried to weevil away, and when at the same time the wretched peasant has to produce, too often by borrowing from a money-lender at simply fabulous interest, his regular share of the fixed Government assessment.

In an article in the *Indian Agriculturist*, so long ago as July 1st, 1876, the editor says :—

“ Nothing fluctuates so much in price as some of the food-grains, wheat in particular : and, as matters now stand, a plentiful harvest, instead of being a blessing to the ryot, strengthens the bonds in which the money-lender holds him. He has to

* Statesman's Year Book of Facts.

† *The Economist*, January 1882.

‡ Mr. J. Danvers' reports.

borrow his seed, and the means of living when prices are at their highest, and to sell his crops when they are at their lowest, to meet the demand upon him of the two joint landlords of the State and the zemindar, and his debt to the money-lender."

In the year 1880, India possessed 4'16 miles of opened line for every 100,000 inhabitants; America had 186'6 miles. But it is needless to further multiply comparisons to show how hopelessly behindhand India is in the race between the two countries. The delay that has been allowed to occur in opening up the country, the vacillation and timidity that has marked the whole railway policy in India, is one of the most striking blots on the Administration.

The importance of extending the system of railways may be judged by the fact that the average cost of bringing wheat from 13 of the largest wheat-producing districts in the Bombay Presidency to the nearest railway station is about 1s. 6d. a quarter. The ordinary cost of cartage varies from about '044 to '061 shillings a quarter per mile, or, in other words, every 20 miles cartage adds on another shilling a quarter to the price.* In anything like a close competitive trade, it is easy to see how little of the whole area of India can be served by our present long trunk lines without feeders.

It is not only in the construction of railways that we are so far behind America; in the working of the railways already opened, we show the same conservative backward policy. In an article in the *Fortnightly Review* for October 1881 on Railways and Waterways, Mr. William Fleming calls attention to the extravagant working of the English lines, to the general want of progress, and to the absence of all petty economies. Every one of his remarks applies with equal, if not with greater, force, to the working of the Indian railways.

In India, with the cheapest labour in the world, we do not seem able to compete with the high-priced labour of America; we are not able to carry grain at the same low rates as are in force on the American lines.

The charge for 100 lbs. of grain from Chicago to New York, a distance of 960 miles, is ordinarily 30 cents in summer and 35 cents in winter, equivalent to from 0'64 to 0'743 shillings per quarter for every 100 miles. The charges over this route have ruled much lower than this; they have touched 20† and even 12½ cents per 100 lbs., or 0'425 to 0'265 shillings per quarter every 100 miles. The last quotation I have seen was [14'5 cents per bushel,‡] 0'505 shillings per quarter per 100 miles.

And with all these low rates the American lines seem to pay. Last year on a length of 105,000 miles, costing £1,200,000,000, the receipts were £150,840,000, the working expenses £93,480,000, the net

* See Selections from the records of the Government of India in the Home, Revenue and Agricultural Department, No. CLX.

† Annual Reports of the Trade and Commerce of Chicago.—*Fortnightly Review* for October 1881.

‡ Report by Mr. Nimmo, Chief of the Bureau of Statistics, on the internal Commerce of the United States.

receipts representing on the average about 4·91 per cent. on the capital invested.

Comparing American rates with those ruling in India, the cheapest rates now in force on the three principal grain-carrying railways are as follows :—

The Punjab Railways—

Ludianah to Kurrachee, 937 miles, [Rs. 0-13-9 per maund,] 0·92 shillings per quarter per 100 miles. Delhi to Kurrachee, 1,169 miles, [Rs. 1-0-9 per maund,] 0·90 shillings.

The East Indian Railway—

Delhi to Howrah, 954 miles, [Rs. 78 or Rs. 96 per 100 maunds, in consignments of not less than 270 maunds, according to whether certain conditions as to bagging, &c., are or are not complied with] 0·82 to 1·01 shillings per quarter per 100 miles.

The Great Indian Peninsula Railway—

Jubbulpore to Bombay, 616 miles, [Rs. 0-10-9 per maund for consignments of over 200 maunds,] 1·09 shillings per quarter per 100 miles.

And these Indian Railway rates, hampered as they are with all sorts of vexatious restrictions as to minimum loads, maximum weights per bag, special bagging, marking, &c., &c., have only quite lately been introduced. They are considered as a great concession to the Indian grain trade, and as something altogether exceptional in point of cheapness.

The ordinary rates for small consignments, the rates in fact that affect the small native trader, are much higher than this. On the East Indian line they are [33½ pies per 100 maunds per mile] no less than 1·74 shillings per quarter per 100 miles. On the Great Indian Peninsula Railway the rates are [Rs. 0-15-8 for one maund over 616 miles] as much as 1·60 shillings per quarter per 100 miles. In other words, the rates for the carriage of grain that affect the small native trader are more than 3 times higher than the American rates.

The Punjab Railways, to their credit be it said, have a single rate, irrespective of the amount tendered. Rates depending on minimum loads are quoted by many of the railways in India, and hence must have had the sanction of Government. There is, however, some doubt whether this practice comes strictly within the spirit of the Common Carriers Act. In America, any discrimination in freight rates between two points, depending only on the quantity of freights shipped, has been held by the Courts a violation of the impartial duty due to the public from the Railway Corporation. This is undoubtedly the correct view to take of the matter, for a low rate, with a minimum load, is a concession that can be availed of only by the large trader.

The lowest rates ever sanctioned for the carriage of grain by rail are on the Punjab Railways, viz., [¼th pie per maund per mile,] 0·746 shillings per quarter per 100 miles. These reduced rates are due simply to the active competition of the boat traffic on the river Indus, and are considered to be so probably unremunerative that the present nerveless management of the lines have never given the public the

advantage of them. But all the same, we must not withhold our admiration for the enterprising and far-sighted policy of the Board of Directors of the Sind, Punjab and Delhi Railway, and of the present Director-General of Railways, both authorities having, on the motion of the Manager of one of the Punjab State Railways, approved of the introduction of the only rate in India that compares at all favorably with the rates in force on the American lines.

Collating the Indian with the American rates, they compare as about 0·5 shillings in America to about 0·9 shillings in India; in other words, the *cheapest* railway rates in India are even now more than one and a half times the ordinary American rates.

Summing up the whole facts, it appears that every 300 miles of railway carriage at the present high rates adds on an extra charge of one shilling a quarter in excess of what the charge would be if the wheat were carried on an American line. Taking the average distance from the sea-board of the principal centres of the wheat trade in India, we find that Indian wheat is, through the indifference shown to the whole subject,* unnecessarily weighted in the competition to the extent of more than 3 shillings per quarter.

If it can pay the American lines to carry grain at the rates they do—and 20 cents per 100 lbs., or 0·425 shillings per quarter per 100 miles, has been stated by a very careful authority† as about the actual cost of carriage between Chicago and New York—I do not hesitate to say that the maintenance of the present high rates on the Indian lines constitutes a grave reproach to the whole Indian Railway Administration, which, in the interests of the country, should be removed as early as possible. The fact of there being practically no active competing water-carriage in the case of the Great Indian Peninsula Railway should not veil the eyes of the Government to the mischief the high rates on this line are doing to the whole of the agricultural community.

This is only the loss *after* the wheat comes on to the railway. Taking this, together with the ruinous cost of cartage for long distances, it is not surprising that India at present succeeds in carrying off only a portion of the English wheat trade at times when prices are ruling the highest, instead of occupying the position she ought of being able to dictate her own prices to America.

My remarks throughout have referred specially to wheat, but there seems no good reason why India should not compete in supplying England with some of the other articles of agricultural produce shown in Appendix B., more particularly Indian Corn.

It is far easier to point out all these failures than it is to suggest practical remedies. To a great extent they arise from the system of Government.

In the first place, America is fortunate, in that the ultimate decision on any large question of policy rests generally with self-made men in the full tide of their career, whose struggles in life are daily teaching them exactly what the country requires in order that they and it may get on together. This obviously secures more progress

* See Appendix C.

† Commissioner Fink's evidence before the New York Railroad Investigating Committee. Also, *New York World*, 17th March 1880.

than where affairs are dealt with by retired officials, whose careers are practically over, and whose experience of the country, when India was asleep in her cradle, is almost worse than useless, now that the young giantess has awoke, longing to stretch her limbs, and eager to pry into, and to take an active part in, the busy world around her.

In this country, the Viceroy and all the other higher officials of India, with a five-year term of office, succeed each other so rapidly that there can be no continuity of statesmanship. Successive officials frequently hold views so diverse that the second during his term of office undoes a good deal of the work done by his predecessor. Neither perhaps are absolutely right, and neither absolutely wrong; the same questions are viewed from different aspects, and few officials find themselves able to follow exactly in the same lines as their predecessors. We have thus had already no less than three distinct changes of railway policy, each accompanied by a long period of constructive inaction. We first tried broad-gauge railways constructed by Companies under a guarantee of 5 per cent.; then metre-gauge State Railways constructed directly by Government. The policy then got rather mixed, or perhaps it was we lost the little policy we ever possessed. For in defiance of railway experience all over the world, we now build both metre-gauge and broad-gauge railways in the same country, every now and then varying the proceedings by trying both gauges, one after the other, on the same line. Now on the ebb-tide we have turned in the direction of the encouragement, by free grants of land, of unaided private enterprise; with every chance of the flood carrying us back to Companies under some species of limited guarantee.

As regards the construction of railways, perhaps the saddest thing is that no one connected with the Home Government seems to thoroughly recognise how backward the country is in this respect. On the contrary, after reading the reports on Indian Railways submitted annually to Parliament by Mr. J. Danvers of the India Office, one might almost suppose that the Indian Railway millenium was fast approaching, and that the progress of railway construction in India was all that could be desired.

It is not that the local authorities in India are not alive to the importance of opening out communications; they are so keenly, and a great deal is written yearly on the subject. It is not that the able editors of the Indian Press are not instant in pressing the subject on the attention of the public. But both are powerless to carry out the measures they know are vital to the welfare of the country. The final decision rests with the Home Government, and with the Home Government railway construction is nearly entirely a pure matter of finance. All officials in England connected with this country hesitate to increase the public debt of India by loans which practically can be raised only in London in sterling, the interest on which has to be paid by remittances from India in a silver currency daily depreciating in value.

Without wishing to utter a word against sound finance I may say that although ten years ago this hesitation about raising loans for the construction of railways might have been justifiable, at the present date it can scarcely be defended. Railway enterprise in India has got

beyond the experimental stage ; it is now a tried fact, and to hesitate further will be nothing but economical blundering.

The results of the lines already opened have shown conclusively that, taken all round, the bad with the good, even including lines made solely for military purposes, the net railway receipts more than cover the charges for interest on the capital expended, without counting the incalculable benefits accruing indirectly to the country, more especially the saving of interest on the average value of commodities always *in transitu*.

Para. 55 of Mr. Danver's last official report runs as follows :—

“55. Taking all the lines together, the net receipts last year yielded a return of nearly £5-3 0 per cent. on the capital expended. In the year 1880 they were at the rate of £4-15-0 per cent. In 1879, £4-7-0 per cent.”

With facts like these conceded all round, and with Consols standing at over £100, there seems no clear reason why any limit should be placed on the raising on railway loans beyond the power of the English money market to supply at low rates of interest, and the ability of the Indian Government to expend the sums borrowed with advantage.

At the present time, the moneys annually available for the construction of railways in India are limited to the following sources :—

- (a) £1,800,000, part of a sum of 2½ millions annually borrowed by the Secretary of State for the construction of ‘*Productive Public Works*.’
- (b) £500,000, part of the special taxes lately imposed for the protection of the country from famine.
- (c) £2,000,000, (about, for the sum varies year by year*) available from the surplus revenues of India.
- (d) Sums expended by private companies.

The available annual State expenditure under heads (a), (b) and (c) may, therefore, be taken at about £4,300,000, equivalent, at the rate of £10,000 per mile, to about 430 miles annually of broad-gauge railway. The amount of the probable future expenditure by private Companies can at present hardly be guessed at, for the experiment lately made of floating the North-Western Railway Company without any Government guarantee has shown that the English public are not yet inclined to invest in Indian Railways on the mere chance of their paying. At present only 455 miles of line are under construction by private Companies without any guarantee.

The whole programme of about 500 to 600 miles a year is ridiculously unequal to the present requirements of India, and the more one sees of Indian financing, the more certain does it appear that the programme could easily be doubled, or even trebled, without reasonable chance of financial embarrassment. ‘Money there is in plenty, if only it were economically and unflinchingly administered.

The finances of India are, however, a great mystery, State accounts,

* 1879-80	£2,122,350.
1880-81	£2,945,744.
1881-82	£2,186,500.

which might be drawn out in all the simplicity of those of an ordinary mercantile company, are complicated to that degree that I believe few, if any, of the Members of Parliament really understand them. One item particularly, the 'Productive Public Works' Loan I before referred to, is inscrutable and past finding out. A loan, rigidly limited to an annual sum of 2½ millions, is raised by the Secretary of State for the construction of '*Productive Public Works*';—the expenditure from these funds is positively restricted to the construction of works, the net receipts from which, it must be shown by the most elaborate forecasts, will, within a certain number of years after opening, in all probability repay the interest of the capital expended on them;—the powers of sanctioning expenditure from these funds by the various authorities concerned are comparatively curtailed;—and throughout every order issued by Government on the subject of the productive loan expenditure, it seems to be tacitly assumed that a rupee borrowed is infinitely more valuable than a rupee raised by ordinary taxation.

While every possible restriction is thus placed on the expenditure from borrowed funds on revenue-producing works, little or no restriction is placed on the expenditure from the ordinary revenues on works that are not expected to produce revenue. The powers of all authorities concerned to spend or to waste the ordinary revenues on non-productive works are complete. It is as if a land-owner, with a rental of £3,000 a year, borrowed £10,000 for the improvement of his estate, and while miserly to a degree over the expenditure from the £10,000 he borrowed, wasted his annual income in every kind of personal extravagance.

I can see nowhere any appreciation of the broad truth that these revenue-producing works, from the mere fact that the Indian public is prepared to pay for them, are really the works the public most require, and those on which every available resource, either from loans or from income, that Government has at its command should be freely lavished. There is no recognition of the prosaic fact that we might not have to borrow so much if we were more careful of our ordinary income.

During my whole residence in India nothing has impressed me more than the needless waste of the public revenues. It is not so much that there are any large items on which the public expenditure is notably extravagant, as it is that there is a general leakage all round. Money is laid out on buildings that for the present might well be done without; £1,000,000 goes yearly in unproductive military works alone; no one is found strong enough to deal with the exhausting military charges both in India and at home; useless offices carrying salaries simply enormous, when compared with corresponding salaries at home, are allowed to continue on long after their uselessness is a matter of notoriety. As if this were not bad enough, salaries originally fixed for Europeans on the wear and tear of life in a foreign tropical climate, and on the inconveniences of nearly continuous exile, are now being given to natives of the country appointed in India. In every department of Government, in almost every office, there is a crowd of native menial servants, many of whom are unnecessary. Each receives about Rs. 84 annually. Taking the net loss of interest on a feeder railway at every one per cent., it makes one simply heart-

sick to think that every half-dozen of these useless creatures robs the country of a mile of light metre-gauge railway. But what can be expected when every department audits its own account? The Auditors of the Civil Accounts are Covenanted Civilians; the Auditors of the Public Works Accounts are Engineers, Civil and Military; those of the Military Accounts are Commissioned Officers. Human nature will cease to be what it is when men will work actively to cut short the supply that feeds them.

I shall begin to feel more faith in the public utterances of our rulers, when I see them thoroughly in earnest in reducing the public expenditure with which they are personally connected. For instance, there is the body-guard of His Excellency the Governor of Madras, altogether unused for eight months in the year, and more or less useless for the remaining four. In this alone is sunk the probable loss of interest on a whole system of provincial light railways. The fact is, the pagoda tree of India is not yet dead; it has only been transplanted from the field of the peasant to the garden of the Government official. Well shaken, it would produce abundance of the same rich fruit as of yore.

What India requires at the present time is economy in every detail of the administration, a rigid contraction of all unnecessary expenditure, and the utilization of all the surplus revenue so saved to the material improvement of the people.

But even as it is, we have left us an annual sum of about £2,000,000 a year, available from surplus ordinary revenues, and a further annual sum of £500,000 available, except during famine years, from the special famine taxation. The sum of £2,000,000 yearly represents, capitalized at 4 per cent., no less than £50,000,000, or the value of over 5,000 miles of broad-gauge railway, even supposing that these railways were to produce no revenue at all. Admitting that the new railways were to earn only 3 per cent., or that the annual loss of interest would amount to as much as one per cent., the present annual expenditure of two millions, if properly applied, would give us 20,000 miles of broad-gauge railway. But unless history is to belie itself, unless all the experience hitherto gained on the subject is in vain, it may be reasonably held that so far from there being any loss, the profit accruing to Government from these additional 20,000 miles of railway would, in the future, go far to balance the inevitable falling off in the opium revenue.

If this obvious expedient of capitalizing the present revenue be denied me as too hazardous; if I were even forced to admit that the sum that could be prudently borrowed for the construction of railways in India were limited, and limited to, say, 50 to 60 millions during the next twenty years, and I should be the last to admit either one or the other, I should still insist on the advisability of the whole sum being borrowed, and the whole expenditure incurred during the first seven years, so that the country might have the benefit of the additional length during the last thirteen years, even were all further railway construction suspended during that period.

Undoubtedly, the quickest way of developing the railway communications of India is through the employment of private Companies; and if these cannot be tempted to come into the field without a Government guarantee, I can see no reason whatever

why a limited guarantee of $3\frac{1}{2}$ to $3\frac{3}{4}$ per cent, or even the same terms as have been granted to the Central Bengal Railway, should not be given them. There can be no doubt the net receipts of the railways would more than cover the guarantee, while the fact of Government giving a guarantee and thus sharing the risk would enable Government to fairly claim a participation in the profits above a certain percentage—a participation they cannot otherwise reasonably insist on. The Government would certainly be the gainers in the end ; and as to increasing the amount of sterling debt, that *bete noire* of the Indian Financier, nothing would be easier than to arrange that the guarantee was to be given to the Company, not on the amount of sterling lodged in the treasury at home, but on the amount of rupees lodged in the treasuries in India. This simple arrangement would turn the whole into a rupee loan, while at the same time the promoters would be able to float the Company far easier had they any sort of Government guarantee at their back.

I entirely question any policy that in the hope of attracting English capital to India without a guarantee would be prepared to give over to Companies all the lines which are anticipated to pay, retaining for the direct construction by Government all those which will probably not repay the interest on their capital. In the first place, judging from the recent case of the North-Western Railway Company, it may be doubted whether private enterprise will be forthcoming, without a Government guarantee, no matter how fair the prospects of the line ; and in the next, it seems an almost suicidal policy to totally alienate the very revenue which will enable Government to extend the railway system of India without its becoming a burden to the country. The present position of private enterprise in regard to railway construction in India is far more logical than is that of the Government. The promoters of English Companies say very naturally to the Indian Government : “ You draw out the projects, *you* are in a far better position than we are to estimate the probable earnings of the line ; you cannot expect us to invest our money in a losing concern, and if you are so convinced this particular line will pay, what is your objection to giving a limited guarantee ? ” And to this question it seems difficult to give any adequate reply.

The cause that seems tending to make Indian politicians anxious to tempt private enterprise into India at almost any sacrifice, even to thus giving up sources of revenue the country can ill afford, is the feeling on the part of Government—a feeling that is growing stronger daily—that the railway administration of India is getting too big for the Government to manage, and along with this, a mistaken notion that the management of railway business is hardly the proper function of Government. To this, it may be said, that nearly every Government in Europe, as well as the public in America, is rapidly coming to the conclusion that the monopoly of the carrying trade of a country cannot, in the interests of the country itself, be safely entrusted wholly to private agency ; and this is more especially the case in India, where the whole development of the country depends on the low rates at which agricultural produce can be carried. It is a curious reflection that at the very time the Indian Government is thinking of separating its direct connection with railways, the English Government is bringing in a bill for buying up the

Irish Railways. But whatever railway policy be adopted, perhaps the most important point is that throughout the changing policy Government should consistently reserve to itself the right of fixing absolutely the rates on all lines for the carriage of cheap staples.

Possibly the best plan open to Government would be to make over the control of all the railways to a large Board of Railway Commissioners, consisting partly of officials, partly of merchants, bankers, and others interested in the trade of the country, the native element being largely represented. The proceedings of the Commissioners to be perfectly public. To the Commissioners would be made over yearly a fixed sum of £2,000,000, or whatever might be safely spared from the ordinary revenues, and the Commissioners would be empowered, subject to the sanction of Government, (a) to borrow any railway loans they thought fit on the condition that the net loss on the whole of the loans taken severally was not to exceed the annual sum made over to them; and (b) to make arrangements, either by the agency of private Companies, or by the Government Engineers, for the construction of all railways required. The net earnings of each line to go, as far as they would, to defray the interest on the capital expended on that line; the surplus profits over interest, if any, to be made over to Government to reduce ordinary taxation, while the loss, if any, should be made good from the annual sum made over to the Commissioners, the balance remaining in the hands of the Commissioners at the close of any year being applied either to reduce the railway loans, or to reduce the general taxes as might be considered the most advisable.

This, *without costing the country one penny more than the present charges*, (the latter of the alternatives I have suggested would, in fact, reduce taxation) would give a stimulus to railway construction India has never yet known: it would be to the interest of the Railway Commissioners to construct the most paying (and hence the most necessary) lines the first, as obviously every non-paying line would reduce the means at their disposal; and finally it would give the Government a quasi-independent position in regard to railway management which, now that the railways are managed directly by its own officers, it can hardly be said to possess.

Passing to the working of the lines now open:—Of these, by far the most important are the lines worked by the large guaranteed railways, which occupy all the main trunk lines, *i.e.*, from Lahore to Calcutta, from Calcutta to Bombay, from Bombay to Madras. Of the management of these railways in India, it can only be said that it would be difficult to devise any scheme that would be as fertile alike in complication and delay. The guaranteed lines in India are managed by an Agent or Manager appointed by the Company, who is invested with certain limited powers to act on behalf of the Board of Directors in London. With him is associated, for the purpose of carrying out the Government control, an Engineer officer, called the Consulting Engineer, who also is invested with certain limited powers to act on behalf of the Government of India. The Agent of the Company can incur no expenditure, and practically can do nothing without the concurrence of the Consulting Engineer, and the two, like all other co-equal powers, are just as likely as not to differ. Should they not agree, or should the proposal be beyond the limited powers of either

(and their limits are not coterminous), it involves a reference, on the one hand to the Board of Directors of the Company in London, and on the other hand to the Government of India, probably at Simla; and frequently indeed to the Secretary of State in England.

I wonder what the Manager of a Metropolitan line would say if he were called upon to work his traffic properly, and at the same time were not allowed to draw up a new time-table, or to alter a rate without obtaining the concurrence of a special officer of the Board of Trade attached to his office, and without the sanction of the Board of Trade itself sitting in Vienna, and without the approval of his own Board of Directors sitting in Calcutta. It was only the other day that I heard that a reduction in rates, urgently required by the grain trade, could not be carried out on one of the Indian lines, although the local Agent of the Company was perfectly willing, as nearly all the Directors of the Company were away and no quorum could be got together in London.

It is hardly to be surprise that, under such a system, with no outside active competition to stimulate efforts, guaranteed railway management in India does not exhibit more progress; that men take so little personal interest in their work; that there are so few of the untiring efforts of American railway managers to cheapen the cost of conveyance; so little improvement in the rolling stock; such slight reduction in the tare weight of the trains; and that Railway Agents are mostly content to jog along in the old grooves. At present, the guaranteed railways do not expend "large sums each year in costly experiments to cheapen transportation,"* we have in India no Mogul Engines, "that fairly fly with 40 cars, each containing 500 bushels of wheat, or with a train load of 20,000 bushels."† And the necessary consequence of all this is that directly any pressure in grain traffic arises, all the railways in India get hopelessly blocked.

The system of management of the State Lines, compared with this, has of late years considerably improved. After keeping their managers in leading strings for many years, Government has lately given them considerable powers of independent action. But even the State Railways have their own evils; the staff are appointed, not for particular lines, but for general service throughout India, their promotion being regulated on a general list. The consequence is that every promotion or death leads to a sort of general transfer; men are no sooner acquainted with the traffic working of their own line than they are removed to another, to find themselves in a new country in the midst of another race of people talking a strange language. English traffic managers may appreciate this evil, when I ask them what use they think they would be to the lines with which they were temporarily connected, if every year or two they were sent to a different country on the Continent. And yet the change from an English to, say, a German line, can hardly be greater than that from the Punjab to Burma.

The whole of the Indian railways are alike in the marked absence of petty economies, and in the extended employment of expensive European labor in lieu of the cheaper labor of the country. This alone

* Last annual report to the Legislature by Mr. H. Seymour, Engineer to the State of New York.

† *Scientific American*, December 2nd, 1882.

is a great evil, the European railway employes, like all other Europeans in India, being naturally anxious to stay in this country as short a time as possible, and during that time to get the highest possible salary.

In all this, the remedies are obvious and comparatively easy to carry out. The dual system of management of the guaranteed railways could be done away with, and while a perfect financial control was maintained by means of a joint audit on the part of Government and the Company, the Agent might be placed on precisely the same footing as the Manager of a State Railway, the Government Consulting Engineers being more usefully employed in the construction of new lines, thus affecting at once a saving of lakhs of rupees. The staff on the Government railways should be appointed to provincial systems of lines, and left to take their chance of promotion within the Province with which they are acquainted. The more extended employment of native labor should be insisted on ; the posts which could properly be held by natives should be settled, and all further appointments to those posts should be made without importing labor from Europe ; and it should further be decided what proportion of the salary now allowed for foreign labor should be given in future for indigenous labor. (By indigenous labor, I mean *all* born and educated in India, no matter what their extraction). And further some effort should be made to more directly interest the railway employé in the financial results of the working of his line. In fact, every effort should be made towards reducing the working expenses, and in the direction of cheapening transport. The saving effected in wages on the E. I. Railway alone by the partial substitution of natives for Europeans as drivers, has amounted in six years to no less than £160,000, and yet in the face of this, Government pursues the same hesitating, halting, policy as to insisting on the more general employment of native labor.

Under the present contracts with the Guaranteed Railway Companies, Government has the power of fixing the rates for the carriage of goods ; and there can be no doubt that with a little pressure Government could insist on the rates for the carriage of grain being materially reduced. On its own State railways, Government obviously has the power of fixing rates at whatever amounts it chooses.

The first and most obvious duty of Government is to insist on the reduction of the rates for the transport of grain to as low a point as are current on the American railways, so that the agricultural interests of this country could compete with those of America on equal terms. The lowering of the rates will cause only a temporary loss. As in every other case in which it has been tried, a reduction of charges will eventually lead to an increase of revenue.

On the subject of the reduction of railway rates, it is instructive to read the following extract from one of the annual reports of the Chicago Board of Trade. With reference to the low rates that prevailed between Chicago and New York, during the railway competition in 1876, *i.e.*, 15 cents per 100lbs. (equivalent to 0.319 shillings per quarter per 100 miles) the report say :—

“Probably nothing that has ever occurred in the history of transportation in this country has so shaken the public confidence in hitherto-accepted data as to the cost of railway transportation as the rates prevailing during this long contest, and the

inquiry presses itself upon all who give attention to the question, whether, if these rates have not produced a ruinous loss to the contending lines, previous rates have not been in the highest degree extortionate. It is understood to be claimed that, while the business has not been fully remunerative, it has not been, generally, one of actual loss, and at least some of the lines interested have declared their usual dividends, alleged to have been made out of the net earnings of the business."

One more step in the direction of facilitating the Indian wheat trade would be to narrowly inquire into the course the trade takes in each province; and, following the American example of doing away with all tolls whatever on the State Canals, to abolish or reduce all transit duties, tolls, canal fees, port dues, and every other intermediate charge that now tends to increase the cost of Indian wheat landed in London. It might even be found possible to levy port dues on much the same principle as railway freights, not on the gross ship tonnage indiscriminately, but graduated according to the class of cargo brought to, and taken away from the Port.

"In 1878, the difference between the average price of wheat throughout Iowa and in New York is given by a Western writer as over 65 cents. per bushel (21.72 shillings per quarter). By 1880, this difference had been reduced to a fraction under 40 cents. (13.37 shillings per quarter). On a crop of 33,000,000 bushels and more, the difference meant something over eight million dollars to the profit of the Iowa farmers."*

Let the Government of India not cease their exertions until a similar state of things exists in this country.

At present, the state of things is nothing like so satisfactory; the difference at the present time in the price between Kurrachee (12.62 seers), and Ludiana (26 seers), is not less than 16.31 shillings a quarter, and between Bombay, (10 seers), and Jubbulpore (18 seers,) it is as much as 17.86 shillings per quarter. These figures, compared with the difference between the prices at Chicago and New York, *i.e.*, 13.37 shillings per quarter, agree very closely with the result I before deduced from the railway rates themselves as to the probable loss the trade suffers (*i.e.*, more than 3 shillings per quarter), from the high rates maintained on the Indian railways.

And in the face of all these facts, it is to be regretted that the Indian Chambers of Commerce, instead of giving "a long pull, a strong pull, and a pull together" to reduce the railway rates for grain all round, waste so much of their energies in jealous squabbles amongst themselves. The Chambers of Commerce at Calcutta and Bombay still carry on the suicidal policy of petitioning Government against the slightest reduction being made in the cost of the carriage of grain to the rival town; while that at Kurrachee, during the late discussion regarding the reduction of grain rates on the Punjab railways, may be said to have perfectly succeeded in a unique policy of complete self-effacement.

Were cheap communications once secured, measures might be taken to stimulate production. It would not cost much to Government to

* *Scientific American* for December 9th, 1882.

carry out the following suggestions, most of which were put forward by Dr. Forbes Watson in his report :—

(a) To impress on the head man of every village in the wheat-growing districts of India, the necessity of using unmixed seed, and the advantages of growing the best description of wheat the climate and soil of the district will permit.

(b) To furnish all cultivators with seed of the very best quality by making arrangements at the principal centres for the exchange of average parcels of wheat for equal weights of selected seed, an expert being had out from England especially for the purpose of selecting, collecting, and distributing the best seed grain procurable.

(c) To have always on view in the principal markets samples of the different classes of wheat recognized by the English trade, to enable natives to better classify their stock, and to judge of its fair market value.

(d) To send daily to all the principal wheat centres in India telegraphic advices of the prices ruling for the different descriptions of wheat, both in London and at their nearest sea-port.

(e) To hold small District Agricultural Exhibitions as often as possible, at which prizes would be given for the best food-grains and other agricultural produce exhibited.

In addition to these, there are two more measures called for, which, though costly, would probably in the end prove to be economical to any Provincial Government which fairly tried them.

One which has been so often before suggested, is to begin very gradually to establish a whole system of agricultural banks from which the ryots might obtain loans at fair rates of interest, the experiment being first tried on a very small scale, and extended if found to be a success.

The second, suggested by the Board of Directors of the Scind, Punjab, and Delhi Railway, would be to build at the principal centres of trade large warehouses in which grain could be properly housed, cleaned, and handled to prevent weevilling. The amount of grain now lost to the country is immense, owing to the defective means of storing it. In an official report on the grain trade in Upper Scind, the District Officer says :—

“ In this district the weevil commences its depredations three months after the grain is extracted from the ear, but the wheat can be preserved for seven months if it be shut up in large earthen jars closed up.”*

If this be equally true of the remaining districts in India, the loss from defective means of storage on the whole must be very great indeed. In fact, the difference between the amount of wheat produced in India and that now exported, after making the most liberal allowance for home consumption in India, gives us a fair idea of what the loss probably amounts to.

Were these warehouses built actually on railway sidings, so that there might be no re-cartage after the grain was bagged, the local trade would soon see the advantage of making use of them ; and merchants would not be long in finding out the advantages of cleaning the wheat up-country, and of thus saving the railway carriage of a quan-

* Selections from the records of the Government of India, H. R. and A. Department, No. CLX., page 146.

tity of dirt to the sea-board. Who can doubt, were the Punjab Government to give facilities for the cleaning of wheat at Ferozepore, and to grant a small subsidy to any line of steamers that would give a preference to grain cargoes from Kurrachee returning with cargoes of railway coal, that the direct through booking of grain between the Punjab centres of trade and London *via* Kurrachee which has been so strongly urged by the Board of Directors of the Scind, Punjab and Delhi Railway, would not be a matter of fact a year after the warehouses were built?

It must not be imagined that there is any great probability of the Home authorities either accepting the suggestions or of carrying out the changes I have now proposed. With all their conscientiousness and their industry, Government officials can hardly be termed either enterprising or progressive. Least of all does their training enable them to appreciate at their full importance the trifling variations in price that in reality rule trade. Nearly every Government official connected with railways in India knows the facts I have now advanced, and most of these facts are constantly ventilated in the public press, and yet next to nothing practical is done on account of the absence of any push on the part of the authorities at home. Even our Indian Government is not entirely free from blame: too often on any large question arising, information is called for from all the subordinate Governments, and finally a number of good resolutions appear in the *Gazette of India*—action ceasing just at the point at which it should begin.

In October 1879, the Government of India published a long resolution regarding the wheat trade of India, the last para. of which runs as follows:—

“With such uncertainties, in view, the measures which Government should take are clearly those which, possessing independent commercial or other advantages, will nevertheless materially assist the export wheat trade so far as it can be legitimately fostered. Railway charges should be kept at a minimum; transit from the producing districts to the seaboard should be facilitated; taxes, imperial or municipal, on the grain should, where practicable, be foregone; information should be rendered as accurate as possible and widely diffused; and production should be stimulated by those means which are equally applicable in the case of agricultural products generally.”

No possible fault can be found with the decisions arrived at, but has the Resolution been altogether acted up to? Has it had *any* practical result? Have the railway charges been reduced to a minimum? To show the miserable hiatus between the formation and the realisation of opinion, I will quote an extract from the *Times of India* of the 6th October 1882:—

“It will be remembered that eighteen months ago the Great Indian Peninsula Railway *increased* its grain rates, though at that time the cost of bringing wheat from Jubbulpore to Bombay, a distance of 616 miles, exceeded considerably the cost of taking wheat from Chicago to Liverpool, a distance of 4,000 miles.”

The writer refers to a rise in rates about April 1881, eighteen months *after* the Resolution of Government was issued; and in the

face of its clearly expressed intentions, the spirit of complacency and indifference, with which this rise of rates was apparently submitted to by the Government, is really very remarkable.

In all matters connected with India, improvement must come from without. The question of the development of India by cheap communications is really a home question, and can be dealt with properly only by those whose interest it is to push it forward. My object will be gained if I have shown how directly the English trade is interested in the development of India; how, by giving India the benefits of cheap communications, she could so affect the price of wheat that the keener competition thus caused would force the Western farmer to consider the ruinous effect of the present protective duties on the prime cost of all his agricultural produce; how the opening out of India would tend to the reduction or removal of the duties that now so seriously restrict the exports of English manufactured goods; and, finally, how greatly the diversion of the English wheat trade to India would increase her consumption of iron and cotton goods. Were the railway system of India properly developed, the very depreciation of the rails would cause a very material annual outlet for iron from England.

Let the English manufacturer, whose interests are thus affected, insist on answers to two simple questions put to the Indian Home authorities: Why are Indian railways not made faster? And why are they not more cheaply worked? And let him never rest till he gets satisfactory answers to both. Throughout his efforts to open out India, let him be encouraged by the thought that, while closely pursuing his own interests, he is as earnestly advancing the interests of others less able to help themselves.

For myself, though as a staunch Liberal, the very last to fail to appreciate the great strides that both education and political liberty are now making in India under our present progressive and liberal Viceroy, I feel that, in the advancement of these high aims of the more educated classes, there is some danger that the more prosaic wants of the humble agriculturist may be forgotten. The well-to-do classes in India may now safely be left alone to advocate their own rights. But I may not yet be out of place in pleading the cause of the uncomplaining ryot, who silently starves and makes no sign. Education is good, and so is political freedom, but more vital than either to the Indian peasant is sufficient food and decent clothing.

To the Indian ryot will neither be forthcoming till the markets of Europe are freely open to the produce of his village lands. The question of cheap communications appears to me so vital to the material prosperity of the agricultural classes of India that I would say that whoever, whether in his own interests or in the higher cause of simple humanity, will so labor as to give cheap communications to India will secure the blessings of millions of the poorest, the most patient, hard-working and law-abiding people in this world—people in whom centuries of mis-government and oppression have never succeeded in stamping out the sterling good qualities which they still share in common with us.

HONESTUM, QUOD PROPRIE VEREQUE DICITUR.

P.S.—I had just finished writing the above, when a long Resolution regarding the wheat trade and the development of railway com-

munications generally was published by the Government of the Punjab. This is particularly cheering, for Sir Charles Aitchison is a statesman who will see that any policy he accepts is vigorously carried out—a man essentially of the good old Punjab type—

—“One

“Who can rule, and dare not lie.”

APPENDIX A.

Statement of the amount and value of Wheat imported into England in the years 1880 and 1881.

	QUANTITIES.		VALUES.	
	1880.	1881.	1880.	1881.
	Cwts.	Cwts.	£	£
Russia	2,880,108	4,018,895	1,568,261	2,171,372
Germany	1,608,275	1,361,724	978,149	812,476
France	1,446	6,693	747	3,471
Turkey	4,005	33,532	1,841	17,157
Roumania	123,135	214,855	66,470	97,319
Egypt	1,590,957	1,070,488	793,455	525,650
U. S. Atlantic	29,539,502	24,796,551	16,325,690	13,744,739
U. S. Pacific	6,550,367	11,241,523	3,817,851	6,310,327
Chili	1,343,860	1,391,803	733,790	582,690
India	3,247,242	7,308,842	1,773,216	3,826,851
Australia	4,267,743	2,978,130	2,397,556	1,719,925
British N. America ..	3,893,544	2,860,854	2,069,747	1,617,404
Other Countries	147,120	58,779	77,512	27,423
Total	55,197,304	57,042,669	30,604,285	31,466,804

APPENDIX B.

Statement of the amount and value of the Imports into England of the following articles of agricultural produce.

	QUANTITIES.		VALUES.	
	1880.	1881.	1880.	1881.
	Cwts.	Cwts.	£	£
Barley	1,685,527	9,811,051	4,998,442	4,069,402
Oats	13,862,430	10,336,795	4,946,440	3,781,013
Peas	2,141,438	1,972,724	871,513	797,299
Beans	2,574,759	2,070,199	1,049,274	820,521
Indian Corn	37,153,658	33,429,722	11,141,642	10,392,460

APPENDIX C.

To show the indifference even now paid to the subject of the reduction of the rates for the carriage of grain over the Indian Railways,

it will be sufficient to state that the rate for the carriage of grain, below which Government has no power to reduce, is fixed in the contract between Government and the South Mahratta Railway at [$\frac{1}{2}$ pie per maund per mile] 1·05-shillings per quarter per 100 miles, or double the American rate ; while that in the Central Bengal Railway contract is [$\frac{1}{2}$ pie per maund per mile] 1·74 per quarter per 100 miles, or actually more than three times the present American rates.

BENGAL CHAMBER OF COMMERCE, CALCUTTA, 15th March, 1883.

J. GORDON, Esq., Secretary Chamber of Commerce, Bombay.

DEAR SIR,—In compliance with your request of the 6th instant, I have the pleasure to send you under separate cover ten copies of the Chamber's letter to His Excellency the Viceroy on the subject of the development of railway communication in India.—I have, &c.,

H. W. J. WOOD, Secretary.

CALCUTTA, 10th March, 1883.

From the SECRETARY of the BENGAL CHAMBER OF COMMERCE, to His Excellency the Most Honourable the MARQUIS of RIPON, K.G., G.M.S.I., Viceroy and Governor-General of India.

MY LORD MARQUIS,—I am desired by the Committee of the Bengal Chamber of Commerce to forward for your Excellency's perusal a copy of a pamphlet on the development of India, which has lately been published at Calcutta, and which has attracted considerable attention on the part of the mercantile community of this place.

As in most papers, written with the special object of exciting interest and inquiry, and which deal with very large and comprehensive subjects, the writer may be said on some points to have somewhat overstated his case, and, perhaps, on others, to have under-estimated the difficulties that doubtless surround the large questions of which he treats.

But in the main, the views taken in the paper appear to the Committee to be correct and sound. The facts advanced are chiefly in connection with the wheat trade of India ; but on this point the Committee may add that there is hardly a trade or a manufacturing industry, either in England or in India, which is not directly interested in the development of cheap communications in India, and in the expansion of trade that would undoubtedly follow from thus affording an outlet for the agricultural products of the country.

Believing that there can hardly be a subject which, throughout all the educated community, both European and Native, should command a more universal interest than that dealt with in this pamphlet, the Chamber of Commerce has ventured to bring it prominently to your Excellency's notice.

From information before the Chamber it would appear to be a positive fact that in many parts of India, even within the Lower Provinces

of Bengal itself, a bumper harvest, at the present time, is a positive misfortune to the ryot. Last year, and the year before, it is beyond doubt that difficulty was experienced by the Government in collecting the revenue, by the zemindars in realising their rents, and by Manchester merchants in selling their piece-goods, to a great extent owing to the disastrously splendid harvests. Rice and food were so cheap that people, a few miles from the railway, could hardly realise enough specie to pay their rents, or to buy the few articles of English manufactured goods they ordinarily consume.

In Central India, along the valley of the Mahanadi, year after year, wheat may be purchased at from 5 to 6 shillings per quarter. The greater part of this country is an expanse of fertile soil, where grain and oil-seeds, cotton and tobacco, might be grown in enormous quantities were facilities only given for this agricultural produce to find a market. But at present there is no access to this country from Calcutta by rail;—the province is practically closed to all foreign trade with this side of India;—there is neither any outlet for the surplus corn produced, nor any means by which English salt and English piece-goods can penetrate into the interior of the country.

The loss, both to England and to India, that is caused by the present defective communications of India is, in the opinion of the Chamber of Commerce, important enough to come properly within the sphere of practical polity. The evil affects both countries, for there can be no doubt, could the whole of the surplus agricultural products of India be profitably placed on the markets of Europe, the larger export would, to a great extent, be balanced by a greater consumption of English goods in this country. The Committee acknowledge gratefully the recognition given by your Lordship's Government to the existence of Indian industries, and while admitting fully the justice of your Lordship's remarks at the recent Trades' Dinner on the unsoundness of so-called "protection," the Committee would add that the removal of obstructions to the existing trade of the country is the only species of protection that is asked for.

As regards the extension of railways, the only cause the Committee can assign for the singular delay that now occurs in the construction of lines, of which every one admits the pressing necessity, is the multitude of different authorities through whom every railway scheme has to permeate before any final decision can be arrived at. The present system is so involved that there is no wonder that years may and do elapse before any decision can be arrived at even with regard to lines of paramount importance to the trade of the country.

As instances of such delay, the Chamber would specially call attention to the following cases:—

(1.) *The Indus Bridge at Sukkur*; the link now wanting between the granaries of the Punjab and the sea-board.

After years of discussion, the construction of the Indus Valley line was decided upon in the year 1869; the line was opened throughout in 1878, and now in the year 1883, the design for the Indus Bridge is not even yet decided upon.

(2.) *The Hooghly Bridge*, the completion of which is so urgently required for increasing the shipping facilities of the Port of Calcutta,

The first design of this Bridge was drawn out in August 1879, and to this date, the Committee believe, the iron work for the Bridge has not yet arrived from England.

(3.) *The Nagpur-Calcutta Railway.*

The surveys for a line running from Nagpur eastward through the Central Provinces as far as Chattisgarh were completed, and the project submitted to the Government of India in November 1871. Orders on the project did not apparently issue till the year 1875-76. The alignment of the Railway was finally fixed upon in 1876-77. Nothing was done in 1877-78. Orders for the construction of the line were issued only in May 1878, nearly seven years after the project had been submitted. The first section of line was opened on the 6th April 1880. As regards the extension of the line towards Calcutta, the Committee understand that, although the railway will open out some of the richest districts in India, both in agricultural and mineral wealth, and although the surveys were practically completed last year, sanction cannot yet be obtained from the India Office for the commencement of the line.

Unless some simpler system can be devised for dealing with the railway business of Government, the Chamber confess they view the future with the gravest apprehension. The accommodation available at the Howrah station is already far too small for the existing trade of the Port of Calcutta, and the present inconveniences are daily increasing with the additional traffic brought to the port by the various sections of railway newly opened from time to time. It will, the Chamber fear, be impossible for the shipping facilities of Calcutta to expend *pari passu* with the trade *unless some single and final authority in this country is empowered to deal more expeditiously with all the railway and shipping questions involved, as they arise.*

Much stress has lately been laid by Government on the desirability of promoting the construction of railways by private enterprise. On this point the Committee ventures to suggest that it will be almost impossible to attract local capital to the construction of railways until promoters can be certain of a more speedy decision with regard to the schemes they place before Government for approval.

At present, when a scheme is put forward by capitalists both ready and able to carry it out, after the scheme has been carried through the Local Authorities, the Provincial Government, and the various Departments of the Government of India, all of which necessarily takes some time, it is almost certain that nearly every important point in connection with the proposed line will have to be referred home to the Secretary of State in Council; the Council representing a large deliberative body of almost every shade of opinion. Under the most favourable circumstances, at least a year must probably elapse between the inception of the scheme and the reply from England.

Under such circumstances how can it be expected that railway construction by private enterprise will be warmly taken up in this country? It cannot be expected that capitalists will consent to lock

up a large amount of money (liable practically to be called upon at any moment) for the considerable period of time, which a reference home now necessarily entails.

It appears to the Committee that subject to certain general principles, and also within a certain limited scope of railway extension, to be in each case laid down by the Secretary of State, the Government of India should be empowered to deal finally with railway schemes put forward by promoters in this country. If private enterprise is to succeed (and more especially in this country, where the construction of work can be carried on only at certain seasons, and where hence a delay of only a few weeks means, in many cases, the loss of a whole year) it is an absolute necessity that promoters should be assured that no protracted delay will be allowed to occur before they are authorized in proceeding with the work.

Regarding the reduction of railway rates, an analysis of the published accounts of the various Companies, leads the Committee to a belief that the standing charges (*i.e.*, those that do not fluctuate materially with the traffic carried) form so large a percentage of the total working expenses of railway lines that a moderate increase of traffic soon balances a material reduction in rates. Without burdening this letter with the detailed statistics on which this conclusion is founded, the Committee will here content itself with observing that goods rates have, within the last few years, been to some extent reduced, and that, speaking generally, with each reduction of rates, the net profits of the railways have increased. The Committee believe the limits has not yet been reached at which a reduction of rates would result in more than a very temporary loss to the Railway Revenues of Government.

The Committee trusts, not only that some investigation may be made with the object of solving how far the railway goods rates could, in the interests of the country, be reduced without loss either to the Railway Companies or to Government, but also that some practical decision on the subject may be arrived at, and early acted upon. The Chamber feel the urgent necessity of removing, as far as possible without any further delay, the obstacles that now prevent the Indian trade from competing with that of America on more equal terms.

The Committee of the Chamber of Commerce would be glad to see some recognized point of contact established between the daily increasing trade of the country on the one side, and the Government railway interests on the other. Should the necessary powers be given to the Government of India to deal (within certain limits) with all railway business in this country, the authority who may represent this department of the Government of India will doubtless in himself furnish the point of contact required. But in addition to this, it seems to the Chamber of Commerce advisable that some means should be devised of bringing the Chairman of the Port Commissioners, the Director-General of Railways, the Government Consulting Engineer, the Agents of the E. I. and E. B. Railways, and all the other authorities directly connected with the detailed export and import business of the trade of Calcutta into some regular system of *personal* communication, in order to facilitate the

discussion and the settlement of all the numerous and intricate questions involved.

These matters have been so often the subject of deliberation on the part of your Excellency's Government that the Committee confidently hopes that the whole of the questions may now be considered sufficiently ripe for some immediate action to be taken with regard to them. In the interests of the entire Anglo-Indian trade, the questions of the more rapid extension of the Indian railways, of the reduction of the goods rates, and of the provision of more extended shipping facilities at the principal Indian ports, appear to urgently call for prompt action on the part of Government.

Along with the great advantages to the cotton, the iron, and the ship-owning interests in England, which would be secured by the development of the trade of India; the Chamber have in view no less the advancement of the material prosperity and the advancement of the natives of this great country.

Whatever conclusions may ultimately commend themselves to your Excellency, the Bengal Chamber of Commerce feels assured that the pressing and vital questions dealt with in the paper now forwarded, and which they have been enabled to touch upon only briefly in this letter, will receive the careful and earnest attention that questions of such extreme importance to the welfare of all classes of Her Majesty's subjects so unquestionably deserve.—I have, &c.

H. W. J. WOOD,
Secretary Bengal Chamber of Commerce.

LETTER ACCOMPANYING THE ABOVE PAMPHLET, ADDRESSED TO THE VARIOUS CHAMBERS OF COMMERCE IN ENGLAND AND TO PROMINENT PUBLIC MEN INTERESTING THEMSELVES IN INDIAN AFFAIRS.

BOMBAY CHAMBER OF COMMERCE, *9th July*, 1883.

SIR,—I am desired by the Committee of the Bombay Chamber of Commerce to forward to you a pamphlet on the development of India, which has lately been published at Calcutta, and which has attracted considerable attention on the part of the mercantile community of this place.

The questions principally dealt with in this pamphlet are the development of the wheat trade of India by means of cheaply constructed railways, and by the reduction of the rates for the transport of grain to as low a point as those ordinarily current on the American lines, so that the agricultural interests of India might compete with those of America on equal terms. If such a policy were adopted by the Government of India, there can be no question that it would result in incalculable benefit to the country. The

arguments advanced are chiefly applicable to the wheat trade, but there is not an industry, agricultural or manufacturing, in the general trade of the country, which would not also benefit from the great and rapid expansion that would follow. The progressive annual value of the export and import trade of India, during the last 30 years, shows that the extension of railway communication, while stimulating exports in the first place, has always been attended with an increased demand for European and other products. In 1852-53, when the construction of railways in India commenced, the exports and imports of British India taken together, and including treasure, amounted to £38,422,100 : in 1882-83, when there were over 10,000 miles open, they amounted to £132,585,850.

These results have been obtained while comparatively high rates for the carriage of goods, and of food-grain particularly, on Indian lines have prevailed, and in a country which, if proper facilities were given, could probably supply the United Kingdom with the whole of its annual import of wheat. The total production of wheat in India is, as estimated by good authority, not less than 40 million quarters, the average annual import from all countries into the United Kingdom being only about 11 million quarters ; and the total consumption of wheat in India is not large, the bulk of the inhabitants subsisting on cheaper staples. Yet a comparatively small proportion of this large production is, in ordinary times, exported, owing to the difficulty and expense involved in transporting it from the interior to the seaboard. That the amount of wheat held in India must indeed be vast, is apparent from the fact that, even with our present defective communications, the export rose from 2,195,550 cwts. in the official year ending 31st March 1880, to 7,444,449 cwts. in 1881, and again to 19,863,520 cwts. in 1882, or more than one-half of England's total imports of wheat from America in the year 1881. This enormous expansion of the exports in 1881 and 1882 was due to short crops in America and Europe in 1881, and doubtful prospects of the European harvest of 1882, until late in the summer, when, a fair average being assured, the exportation fell to 14,151,765 cwts. The rates for the carriage of grain, which affect the small native trader, are on the East India and the G. I. P. Railways about three times higher than the rates for the carriage of grain in America ; and taking these high rates, together with the

ruinous cost of cartage for long distances, from the wheat fields to the railway stations in the interior, it is not surprising, as the writer justly observes, that India at present succeeds in carrying off only a portion of the English wheat trade at times when prices are ruling the highest, instead of occupying the position she ought of being able to dictate her own prices to America.

A point of great importance referred to in this paper is that Government should consistently reserve to itself the right of fixing absolutely the rates on all lines for the carriage of cheap staples. Government has, it is true, in its contracts with the Guaranteed Companies, reserved the right of fixing the maxima of all rates and fares, and the Government of India, in its Resolution No. 1174-80 of 1868, declared that such maxima should thenceforth be fixed by Local Governments, that the actual charges within such maxima should be regulated by the Railway Companies, and that the maxima should leave a reasonable margin for the exercise of a discretion by the Companies in varying the working rates, as circumstances might, in their opinion, require. The Bombay Government fixed as the maximum rate for food-grain 12 pies per ton per mile, which is nearly double the present rates charged by the G. I. P. Railway Company, high as these rates are in comparison with those adopted on other routes. The Chamber of Commerce in September 1881, having in view the arbitrary action of the G. I. P. Railway Company in raising its grain rates in April previously—an action which might at any time be repeated,—protested against this maximum rate as being unnecessarily and excessively high, and represented that it should be reduced; but the Government of Bombay declined to interfere with the discretionary power vested in the Board of Directors, with the approval of the Government of India and the Secretary of State.

The experience of the past proves how rapidly the general trade of the country has expended in spite of the limited and costly means of communication available, and the Chamber considers that too much importance cannot be attached to the existing necessity of largely and speedily extending the system of communications throughout the country. It is only by the adoption of such a policy and the application of low carrying rates for goods, particularly grain, that the full development of the natural resources of India, and of her export trade, can be secured, and that she

can hope to compete successfully with other countries. This was the policy which the late Lord Dalhousie had in view in recommending the construction of railways in India, as being the only means by which produce could be multiplied, and the national wealth increased.

While the wheat trade of India needs every encouragement, nothing can at the same time be more discouraging than the tardy and timid policy of the Government in regard to the construction of railways. In respect to cheap communication between the interior districts and the coast, it is said that, at the present rate of progress, India is already about a century behind America, and that every day it is getting still further behind. The result of railway construction in India during the last 30 years is that over ten thousand miles only of railway are open, while in America, about 105,000 miles were open in 1881, and during 1882 no less than 18,000 miles of new lines were projected at an outlay of fully £90,000,000.

The Committee have touched upon only a few of the more important facts referred to in this able paper as accounting for the comparatively backward state of India. With these, and with the remedies suggested, they generally agree: the views set forth are, in regard to the extension and improvement of lines of internal communication, similar in the main to those advocated by this Chamber in the letter which it addressed to the Famine Commission on the 9th of May 1879. But the pamphlet abounds with carefully compiled facts and practical suggestions admirably digested, and the Committee desire to commend it to the attentive consideration of all who are interested in the Indian trade, and in the progress of India.—I have, &c.,

JAMES THORBURN, Chairman.

J. GORDON, Secretary.

No. 10 R.T./R.

GOVERNMENT OF BENGAL, PUBLIC WORKS DEPARTMENT,

YACHT RHOTAL, 17th August, 1883.

To J. GORDON, Esq., Secretary Bombay Chamber of Commerce.

SIR,—In acknowledging the receipt of your letter of the 9th ultimo, addressed to the Secretary to this Government in the Financial Department, forwarding, with remarks, a pamphlet on the development of India, I am directed to state that His Honor the Lieutenant-Governor is fully alive to the immense importance of extending the railway systems, and of reducing the rates of carriage of goods, and

that the matter is, as far as possible, receiving attention in this Province. I am, however, to remark that the general question can be dealt by the Government of India only.—I have, &c.,

H. C. LEVINGE, Secretary.

No. 1877 OF 1883.

NAINI TAL, 22nd August, 1883.

From the SECRETARY to GOVERNMENT, N. W. Provinces and Oudh,
to the SECRETARY BOMBAY CHAMBER OF COMMERCE.

SIR,—I am directed to acknowledge your letter, dated the 9th July last, regarding the encouragement and development of the Indian wheat trade; and, in reply, to state that the importance of the subject is fully recognised by this Government, and that the Lieutenant-Governor and Chief Commissioner is giving to it his careful attention.—I have, &c.,

J. K. REID,

Offg. Secy. to Govt., N. W. P. and Oudh.

BENGAL CHAMBER OF COMMERCE, CALCUTTA, 6th August, 1883.

J. GORDON, Esq., Secretary Chamber of Commerce, Bombay.

DEAR SIR,—I have had the pleasure to receive your letter of the 9th of last month on the subject of development of the wheat trade of India by means of cheaply constructed railways and reduction of railway rates.

My Committee have read with much interest your remarks on this important subject, and are glad to find that they amply confirm all that they have already advanced in their special communication to His Excellency the Viceroy in connection with Major Conway-Gordon's pamphlet, of both of which I sent you copies with my letters of the 15th and 26th March.—I am, &c.,

H. W. J. WOOD, Secretary.

THE INCORPORATED CHAMBER OF COMMERCE,

LIVERPOOL, 7th August, 1883.

J. GORDON, Esq., Secretary Chamber of Commerce, Bombay.

DEAR SIR,—I beg to acknowledge the receipt of your letter, dated the 9th of July, enclosing copy of a pamphlet on the development of India, and to say that the subject of your communication will receive early consideration.—I remain, &c.,

WILLIAM BLOOD, Secretary.

No. 2064 OF 1883.

PUBLIC WORKS DEPARTMENT (RAILWAY),

BOMBAY CASTLE, 21st December, 1883.

To the SECRETARY CHAMBER OF COMMERCE, Bombay.

SIR,—With reference to the Chamber's letter, dated 9th July, to the Secretary of State for India on the subject of developing the

wheat and grain trade of India by means of a more rapid extension of railways, and the reduction of the rates of transport, I am directed to forward, for the information of the Chamber, a copy of His Lordship's railway despatch No. 6, dated 29th November 1883.—I have, &c.,

H. F. HANCOCK, Colonel, R.E.,
Joint-Secretary to Government.

RAILWAY, No. 6.

INDIA OFFICE, LONDON, *29th November, 1883.*

To His Excellency the Right Hon'ble the GOVERNOR in COUNCIL,
Bombay.

SIR,—I transmit herewith, for your Excellency's information, copy of a communication,* which has been addressed to this Office by the Bombay Chamber of Commerce, on the subject of developing the trade of India, especially that of wheat and grain, by means of a more rapid extension of railways, and the reduction of the rates of transport.

2. On both these points your Excellency is in possession of my views, either directly from myself or indirectly through the Government of India.

3. Your Excellency is also aware that the determination of the general policy which shall in future be adopted in regard to the more rapid extension of railways in India has been postponed until a Select Committee of the House of Commons shall have had the opportunity of considering the subject.

4. But I may remind your Excellency that several very important railway works have been sanctioned during the past year, including those of the Southern Mahratta and Western Deccan lines in your own Presidency.

5. The question of charges for transport has recently formed the subject of much correspondence between myself, the Government of India, and the Railway Companies, and my desire to see rates placed upon a satisfactory footing is well known to your Excellency.

6. I request, therefore, that you will reply on my behalf to the Bombay Chamber of Commerce, informing them that I am fully alive to the importance of the questions which they have brought before me, and that due attention will be given to their statements and opinions.—I have, &c.,

KIMBERLEY.

BOMBAY CHAMBER OF COMMERCE, *16th January, 1884.*

To the SECRETARY to GOVERNMENT, Public Works Department,
(Railway), Bombay.

SIR,—I have laid before the Committee of the Chamber of Commerce your letter No. 2064 of the 21st ultimo, together with the Secretary of State's railway despatch No. 6, dated 29th November 1883, which accompanied it. In that despatch His Lordship states that the determination of the general policy which shall in future be adopted in regard to the more rapid extension of railways in India

* Dated Bombay, 9th July, 1883.

has been postponed until a Select Committee of the House of Commons shall have had an opportunity of considering the subject.

In reply to this communication, the Committee desire to point out the long delay inseparable from the working of a Select Committee, and the general consensus of opinion as to certain lines, such as the extension of the Bhopal State Railway to Gwalior with a branch from Jhansi to Cawnpore; the Jhansi-Manickpur Railway; the Nagpur-Bengal Railway, and the Railway from Godra to Rutlam being, in addition to the lines referred to in His Lordship's despatch, immediately required. The Committee beg very earnestly to suggest that these railways be sanctioned and the works proceeded with at once, and on the broad gauge, leaving the Select Committee to deliberate on the general policy of Indian railway extensions only. The Committee request me to add that immediate railway extension all over India on a large scale is so obviously desirable from every point of view that even for the consideration of the whole subject a Select Committee may be deprecated as a source of unnecessary delay; but as the Secretary of State appears to have decided on a Select Committee, all the Committee of the Chamber would now ask is that the lines detailed above be placed outside the sphere of its deliberations and proceeded with without any further hesitation.

In conclusion, the Committee desire me respectfully to request that a copy of this letter may be forwarded to the Secretary of State for India.—I have, &c.,

J. GORDON, Secretary.

No. 124 OF 1884.

PUBLIC WORKS DEPARTMENT (RAILWAY),

BOMBAY CASTLE, 19th January, 1884.

To the SECRETARY CHAMBER OF COMMERCE, Bombay.

SIR,—I am directed to acknowledge the receipt of your letter, dated 16th January, offering certain remarks with reference to the despatch of the Secretary of State to the Bombay Government, No. 6, dated 29th November last, and to inform you that it has been forwarded to the Government of India for consideration and transmission to the Secretary of State.—I have, &c.,

H. F. HANCOCK, Col., R.E.,
Joint-Secretary to Government.

NOTE.—The letter from the Madras Chamber of Commerce will be found in Appendix OO of this Report.

APPENDIX E.

CULTIVATION AND ADMIXTURE OF WHEAT WITH DIRT AND INFERIOR GRAINS.

*Extract from the Financial Statement of the Government
of India for 1883-84.*

THE WHEAT TRADE.

153. The principal feature of the financial situation of the moment is that during the past year there has been a still further fall in the value of the rupee. The highest price obtained by the Secretary of State during the year 1882-83 for his bills was 1s. 8 3-16d. on April 5th. The lowest price was 1s. 7 1-16d. on December 20th and 27th. The balance of trade between Europe and India was to an unusual extent settled by importations of silver, especially during the early months of the financial year. (See Appendix V.)

154. Some temporary and adventitious causes may possibly have tended to depreciate exchange during the year. But, in the main, the value of the rupee expressed in sterling must, of course, depend on the relative value of gold and silver. The highest price realised for silver in the London market during the year 1882 was 52 7-16d. per oz. corresponding to a

* *The Statist.* Financial and Commercial History of 1882. rupee of 20'289d.; the lowest 50d. corresponding to a rupee of 19'3467d.; the average was 51½d. per oz. corresponding to a rupee of 19'9755d.* On the whole the general tendency has been downwards.

155. The only way in which it is within the power of the Government of India to meet the difficulties attendant on a depreciation in the value of the rupee is to free trade so far as is possible from all obstacles, and especially to do all in its power to develop the export trade.

156. A great deal has already been done in this direction. The import duties have been almost entirely abolished. The export duty on rice remains. It would be most desirable that this duty should be removed. The financial situation does not, however, for the present permit of its abolition. Something, however, may be done in the way of encouraging the export trade in food-grains, and especially in wheat.

157. This trade may, for all practical purposes, be said to date from the year 1873, when the export duty was removed. In 1881-82 nearly a million tons (19,863,520 cwt.) were exported. The export during the current year (1882-83) will probably be about 14,000,000 cwt.,—a figure which, although below the exceptionally large export of 1881-82, is still 100 per cent. in excess of that of 1880-81. The great strides made in this trade during the last few years are to a great extent due to railway extensions in India and, so far as the great exports of 1881-82 are concerned, to deficient crops in the United States.

158. For all practical purposes it may be said that the whole of the Indian wheat trade is with Europe. In 1881-82 only 310,000 cwt. out of 19,863,000 cwt. were shipped to other than European

markets. The largest market for Indian wheat—as for most of the other staple products of India—is England. Out of the total quantity exported in 1881-82, England took nearly one-half, and has taken about the same proportion during the current year. France took 5,308,000 cwt. last year (1881-82) and has this year (1882-83) taken over 3,000,000 cwt. out of the 11,828,000 cwt. already exported. Indian wheat also goes to Belgium, Holland, Italy, and Egypt. But shipments to Egypt are only nominally for that country. Ships go to Port Said “for orders,” and the exports recorded in our trade returns as going to Egypt are mostly intended for some Continental market.

159. The total production of wheat in the United Kingdom is estimated by Sir James Caird at 12,000,000 quarters, or rather over 53,000,000 cwt. (2,650,000 tons). The yield is said by Sir James Caird to be decreasing. He estimates that from 1873 to 1877 the average yield was $2\frac{1}{2}$ quarters to the acre, and in 1879 not more than 2 quarters. In former years the yield has reached $3\frac{1}{4}$ quarters and more to the acre. He thinks that there is a decrease in fertility. The area under wheat is also diminishing and land is being used for more profitable crops, for dairy-farming, for grazing, and for market-gardening. Looking to the increase of population and to the general tendency to devote land to other uses than the growth of wheat, it may be anticipated that the demand for wheat in England from other countries will increase in the future.

160. During the calendar year 1882, the English market was supplied with wheat from abroad to the extent shown in the following table :—

	Cwt.
Russia	9,571,021
Germany	3,083,921
Turkey and Roumania	721,030
Chili	1,656,361
Australia	2,475,127
B. N. America	2,684,828
United States	35,059,623
Egypt*	174,862
India	8,477,479
Other Countries	267,370
Total	64,171,622

161. In addition to this amount of wheat, wheat-flour to the extent of 13,028,705 cwt. was supplied to the English market from foreign countries during the year 1882, of which the United States furnished 7,777,262 cwt.

162. The total imports of wheat and wheat-flour were, therefore, 77,200,327 cwt., of which the United States supplied nearly 43,000,000 cwt., or about 56 per cent. of the whole. It is clear, therefore, that the United States is the most formidable rival with which India has to compete in the supply of wheat to the English market. Wheat-flour has not as yet been exported from India.

163. In this competition the United States possesses many natural advantages over India, which are, however, to some extent counter-balanced by one important disadvantage.

164. Looking first to the advantages, it is certain that the United

* The low imports from Egypt were due to the war. The average imports from that country to England are considerably higher than the figure given above.

States can supply a much larger total quantity of wheat for export than can be supplied by India. Sir James Caird, addressing the Statistical Society on November 15th, 1881, said :—

“ In a single year the United States increased their acreage by an extent equal to our (the English) total growth. In the 20 years from 1840 to 1860 their wheat production rose from 10 to 20 million quarters. In the 20 years from 1860 to 1880 it grew from 20 to 60 million quarters, and their extent of good wheat land is practically unlimited. The two great corn products of that country are wheat and Indian corn, in regard to the first of which this country, and Western Europe generally, will become increasingly dependent on America, and the price of wheat here will be chiefly ruled by the production there.”

165. In the Statistical Abstract of the United States for 1881, it is stated that in 1880 the area under wheat was 37,986,717 acres, the total production amounting to 271,531,624 cwt. or over 62 million quarters (over 13½ million tons).

166. It is difficult to state accurately either the acreage under wheat in India or the total outturn of the crop. Our agricultural statistics are still very defective for most provinces, and there are none at all for Bengal. According to the figures given in the Administration Reports of the different Provinces, there were, in 1880-81, 19,474,594 acres under wheat. These figures are, however, inclusive of 1,000,000 acres in Bengal, which is simply a guess, and is probably very wide of the mark. We shall probably not be far wrong if we take 21 millions as the total present acreage. The great wheat fields are in the Punjab, where also the quality is the best, the North-West Provinces, Oudh, and the Central Provinces. Bombay, Berar, and Bengal also grow wheat extensively, though in a smaller quantity.

167. The outturn per acre varies enormously according to the province and soil, and according to whether the field is irrigated or not. It is difficult to attain accuracy on this point, but it would seem that for all India the average yield cannot be taken, on a liberal estimate, at more than 700 lbs. to the acre, which is less than half the produce of English (from 1,500 to 1,600 lbs.) and considerably less than that of the American wheat fields (850 lbs.)* At this rate of yield the total outturn would be about 6½ million tons, of which it may roughly be said that about one million tons are available for export.

168. The question of the extent to which the amount of wheat available for export could be increased without trenching on the food supply of the people or materially enhancing prices is one of great difficulty. Some remarks bearing on the subject will be found in the Report of the Famine Commissioners, Part I, para. 158. Some high authorities are of opinion that, under favourable conditions as regards

* In some places in America 25 bushels to the acre and more have been taken off an acre, but this quantity is greatly in excess of the average yield. The average outturn in 1880 for all the United States was 799 lbs. to the acre, but this was a small yield. In 1877 it was 848 lbs. A yield of 850 lbs. to the acre is probably a fair general average.

As regards the figure given above for India (700 lbs.), it is to be borne in mind that it purports to give the *average* yield per acre. In some districts the yield is certainly in excess of this figure, and on all *irrigated* land the yield is largely in excess of 700 lbs.

the prospect of a market, it would be possible within a few years to double the amount of wheat available for export, that is to say, to increase it to about 40,000,000 cwt. There can be no doubt that very large quantities of land are awaiting cultivation, especially in the Punjab, Burma, Assam, and the Central Provinces, but of course a good deal of this land is not suitable for the cultivation of wheat. In the eastern districts of the Central Provinces the new lines of railway will now open out a very large tract of wheat-producing country, which up to the present time has been unable to find a market for its surplus produce owing to defective means of communication.

169. Any opinion on this subject can be little more than conjecture. All that can be said with certainty is that, on the one hand, the Indian outturn is capable of very considerable increase, and that the growth of the population in India is proceeding at a relatively slower rate than that of the United States, with the result that the proportionate amount of any increased production required for home consumption is less in the former than in the latter country. On the other hand, the processes of American are superior to those of Indian agriculture. The land in the North-Western and Western States is unexhausted and is of very great natural fertility. The acreage available for further cultivation is described on high authority as being "practically unlimited." The yield per acre in the United States is larger than in India. Under these circumstances it may be regarded as certain that, although the Indian supply of wheat available for export may be very considerably increased, the American supply may be increased to a still greater extent.

170. A further advantage possessed by the United States over India is in the matter of ocean freight. This advantage is not so great as might be the case under different conditions as regards the fiscal laws of the United States. The heavy duties levied by the United States Government on the imported foreign goods naturally check the imports into America from Europe, with the result that, in the comparative absence of a demand for freight from Europe to America, shipowners are obliged to recoup themselves by charging relatively high freights from America to Europe. The disadvantage under which America labours by reason of this condition of things is artificial and not natural. It is imposed by the fiscal law and would be removed were that law changed. In spite, however, of the present condition of the United States Customs Tariff, proximity to the English market, together with the fact that Indian shipping has to pay Canal dues, is sufficient to return the scale in favour of the United States. The distance from New York to Liverpool is 3,073 miles. The distance from Calcutta to London by sea is 8,083 miles; from Bombay to London 6,274 miles; from Kurrachee to London 6,080 miles. Dues are levied on passing through the Suez Canal at the rates of 10fcs. 50c. per registered ton.

171. The charge for steamer freight from New York to Liverpool is very variable. The rates in 1881 and 1882 were, on an average for the year:

	1881.		1882.	
To Liverpool	15s.	2d.	12s.	2d.
„ London	16s.	11d.	16s.	0d.

172. In January of the present year the rates were, to Liverpool 21s. 9d., and to London 22s. 9d. per ton. Freights seem generally to

rule high in January. Comparing the rates from New York to Liverpool for 1882 with Indian rates, we find that during the year 1882 the average charge from Kurrachee to London was £1-18-9 a ton; from Bombay to London £1-15-2½; from Calcutta to London £2-2-11.* Taking the average American rates of 1882 as the basis of comparison, New York may be said to possess an advantage over Kurrachee to the extent of about 26s. 7d. or 22s. 9d. a ton, over Bombay of 23s. 0½d. or 19s. 2½d., and over Calcutta of 30s. 9d. or 26s. 11d., accordingly as the Indian rates are compared with the New York rates to Liverpool or to London. On the other hand, Indian rates compare favourably with freight from San Francisco to the United Kingdom, which in 1881 averaged £3-3-11½ a ton. Last year, of the whole import of wheat into the United Kingdom from the United States, 42 per cent. was shipped from the Pacific seaboard; in 1881 it was 31 per cent.; in 1880 only 18 per cent.

173. The United States possess a further advantage in facility of inland communication. The American railway system has been very rapidly extended during the last few years. No less than 105,000 miles of railway are now open. This rapid progress is due to the vigorous commercial enterprise of the people of America, and to the large amount of capital seeking investment in American undertakings. It is in this respect more than in any other that India presents a remarkable contrast. Local capital is either not available or seeks, generally speaking, for more profitable investments than Indian Railways afford. English capital has only recently begun to turn its attention to Indian Railways, and can as yet scarcely be persuaded to dispense with Government assistance. The development of the country has up to the present time mainly devolved on Government, and, as a necessary result of this state of things, progress has been relatively slow.*

174. In the matter of railway rates also American is at a great advantage as compared to Indian wheat. So far back as 1876 the rates from Chicago to New York, a distance of 960 miles, was on an average 17 cents a bushel, or £1-5-6 per ton for the whole distance. In 1878 and 1879, the published tariff rate was 20 cents per 100 lbs. (18s. 4d. per ton) for the whole distance, but under stress of competition wheat was carried from time to time in 1879 to New York at 18, 15, and even as low as 10 cents per 100 lbs., or 9s. 2d. per ton for the whole distance. Sir James Caird in his evidence before the Royal Agricultural Commission in December 1881, said that the rate had been reduced as low as ¼d. per ton per mile. This rate is equal to £1 per ton for the whole distance. The

* Indian Wheat *versus* American Protection; or, The influence on English Trade and American Protection of the Development of India.

writer of an interesting pamphlet recently published in India* gives 14½ cents a bushel as the latest rate he has seen quoted. This is equal to £1-1-9 per ton for the whole distance. In the official Report on the Foreign Commerce of the United States for the fiscal year ending June 30, 1882, by the Chief of the Bureau of Statistics, the following figures

mercer of the United States for the fiscal year ending June 30, 1882, by the Chief of the Bureau of Statistics, the following figures

* The rates stated here for Bombay and Kurrachee are for the ton of 20 cwt., the rates quoted in commercial circulars being for the ton of 16 and 18 cwt. respectively.

are given as the average through rates in 1881 from Chicago to New York :—

	Cents per bushel.	In sterling per ton.
By lake and canal... ..	8·6	12s. 11d.
By lake and rail	10·4	15s. 7d.
By rail entirely :		

- | | | |
|---|------|----------|
| (1) During the season of Navigation only | 11·7 | 17s. 6d. |
| (2) During the year | 14·4 | 21s. 7d. |

175. The competition of water carriage has evidently a marked effect on rail rates in America. In India, although about 20 per cent. of the wheat brought to Calcutta is still brought down the river in boats, this traffic does not in the least regulate the railway rates.

176. I have been informed on good authority that wheat is now carried from St. Louis, down the Mississippi, all the way through to Liverpool, for 14 cents a bushel, which is equal to 4s. 7½d. per quarter or £1-1-1½ per ton. Mr. Leyland, owner of the Leyland line of steamers trading between Boston and Liverpool, told the Royal Commission on Agriculture that the custom is to take the wheat at Chicago (about 1,500 miles from Boston) and deliver it at Liverpool at a through rate, including everything. This rate in 1881 averaged 10d. a bushel of 60 lbs. or £1-11-1½ per ton, of which two-fifths went to the ship and three-fifths to the railway, the division being made by arrangement.

177. Turning to India, we find that the rate charged in March 1883 by the East Indian Railway from Delhi to Howrah, a distance of 954 miles, is Rs. 71 per 100 maunds, which, at an exchange of 1s. 7½d., is equal to £1-11-5 per ton.

178. From Lahore to Kurrachee, a distance of 821 miles, the rate is 12 annas 3 pie per maund, equal to £1-13-11½ per ton for the whole distance.

179. From Delhi to Bombay, over the Rajputana Railway, a distance of 889 miles, the rate until very recently was 13 annas 6 pie per maund, equal to £1-17-5½ per ton for the whole distance.

180. From Jubbulpore to Bombay, a distance of 616 miles, the rate is 10 annas 5 pie per maund, equal to £1-9-8½ per ton for the whole distance ; that is to say, it costs considerably more to carry a ton of wheat 616 miles over the Great Indian Peninsula Railway, than it does to carry the same quantity 960 miles over the American line.

181. A comparison of rates from other stations would produce similar results. But it is unnecessary to go further. It is abundantly clear that the Indian are much higher than the American rates.

182. In the detailed management of the trade also America has the advantage over India. There is far less handling of the wheat between the field and the hold of the ship in the former than in the latter country. The wheat is brought from the field into store-houses, and thence shot in bulk into the wagons, which are either brought alongside the ship or to warehouses which lie close to the ship. In India, on the other hand, wheat is brought from the field to a central station, say Cawnpore, is there bought by one trader (perhaps the agent of the shipping firm, perhaps another intermediary) from another trader, who has bought it from the cultivator. It is stored and bagged, then carted to the railway station, unloaded, stacked at

the station, and again unstacked to be loaded into the wagons. On arrival at the port of shipment it is unloaded, stored, perhaps, bought and sold once more, then carted to the shore and put on board either from a jetty or from a boat.

183. Indian wheat is quoted in the London market at a lower price than American or Australian wheat. The average comparative prices during the year 1882 were as follows :—

				Per Quarter.	
				s.	d.
American, best	...	...	...	48	9
Calcutta, Club No. 1	...	...	...	43	1
Australian, best	...	...	...	50	5

184. I am informed that the relatively low price of Indian wheat is not so much due to its quality, which is generally very good, but to its admixture with dirt and other inferior grains. At present shippers pay for the conveyance of about 5 per cent. of dirt to England.

185. The admixture of inferior grains with the wheat is, I believe, due to the fact that cultivators often grow other grains in the same field as wheat as a resource in the event of the failure of the wheat crop. This practice tends to keep down the price of Indian wheat.

186. Against this long list of disadvantages under which the Indian agriculturist labours as compared with his American competitor, must be balanced one advantage, which is very considerable. India enjoys free trade, whilst America labours under all the disadvantages of a Tariff designed to protect indigenous manufactures.

187. The disadvantage under which America labours by reason of its protective Tariff is very great. The fiscal laws of the United States oblige the American agriculturist to sell in the cheapest and to buy in the dearest market. For all woollen,* cotton, linen and silk manufactures, for iron and steel, for leather, for earthenware and crockery, for tin plates and ware, for hemp and jute fabrics, and for window glass, the American agriculturist has to pay from 20 to 77 per cent. extra—the average being 43 per cent.,—as the cost of

† *The Western Farmer of America.* Mr. A. Mongre-
dien.

protecting indigenous manufactures. An able writer on economic subjects† has estimated that the agriculturists of the United States pay \$400,000,000 (£82,192,000) a year as the cost of protection, and ten years ago it was stated on high authority (Mr. D. Wells) that the average purchasing power of labour in the United States had been depreciated to the extent of 19½ per cent. between 1860 and 1873.

188. India on the other hand labours, for the purposes of the present argument, under no artificial disadvantages imposed by fiscal legislation. The Indian producer of wheat is absolutely free to exchange his exportable produce to the best possible advantage with the products of foreign countries.

189. I have dwelt at some length on this subject not only on account of its intrinsic importance, but because I shall be glad if I succeed in drawing the attention of those who have a more intimate practical acquaintance both with the trade and the conditions of Indian agriculture than any to which I can pretend, to the necessity of exertion with a view to strengthening by all possible means the

* The duty on Wool has within the last few weeks been reduced, and that on Cotton Goods and Metals has been increased.

position of Indian wheat in the English market. I have not discussed the question of the relative cost of production in India and in the United States, because, independently of the somewhat difficult economic issues involved in this question, it is very difficult to obtain facts of a sufficiently reliable nature to permit of any very accurate general conclusion being drawn from them. I may say, however, that there is reason to suppose that the prime cost of production in India is less than in the United States.

190. It remains for me to state the measures which have been adopted by the Government with a view to facilitating the export of wheat to Europe. In the first place the through rate for wheat conveyed from Delhi or Agra to Bombay has, in communication with the Agent of the Bombay, Baroda and Central India Railway, been reduced from 13 annas 6 pie to 11 annas a maund, and for other grains and seeds of the same class to $11\frac{1}{2}$ annas a maund. The reduction in the case of wheat will, therefore, be 18·5 per cent. on the present rates. It will, no doubt, be followed by a corresponding reduction on the East Indian line. For the future it will be possible to lay down wheat coming from about Delhi or Agra to Calcutta or Bombay at a price of Rs. 4-4-3, or, at an exchange of 1s. 7 $\frac{1}{2}$ d., £0-6-11 $\frac{1}{2}$ per ton less than has heretofore been the case. To state the case in another way, the lowering of the rates is equivalent to a reduction in price of slightly over 1s. 6d. per quarter of wheat in the London market.

191. In the second place, the restriction as regards minimum loads has been abolished on the Rajputana and Bombay, Baroda and Central India Lines.

192. In a letter recently issued from the Public Works Department, giving effect to this decision, the following passage occurs :—

“In conclusion, I am to draw general attention to the fact that every expansion of the export trade will bring to bear a heavier strain upon the facilities for handling, warehousing, removing, and shipping produce at the Railway Stations and Ports. These facilities are believed to be even now in many cases inadequate, and their improvement will, His Excellency the Governor-General in Council trusts, engage the serious attention of the several local authorities at an early date.”

I trust that this very important branch of the subject will receive the serious attention which it deserves.

193. Turning to the question of improved communications, it is to be observed that during the last two years the Railway policy of the Government of India has been unsettled. I do not think that is any matter for surprise or for regret. In inaugurating a policy under which Railways were, to some extent at all events, to be constructed through the agency of private enterprise, it was almost inevitable that there should be a period of transition during which it would be exceedingly difficult to adhere to any fixed policy. It was easy to declare beforehand the broad aim which the Government sought to attain, namely, the construction of Railways through the agency of unaided private enterprise, but experience alone could show how far that aim was attainable. We have now had two years' experience of the private enterprise policy. During that time a certain number of facts have been accumulated, which, we think, are sufficient to enable us to lay down a definite policy, at all events for the immediate

future, say, for five years. We have, therefore, very recently addressed the Secretary of State on the subject, but I am not as yet in a position to state what the final decision of the Government will be.

194. In the meanwhile I may as well state very briefly what have been the main facts as regards Railway construction during the last two years. At the commencement of the year 1881-82 there were 9,619 miles of Railway open to traffic, and 646 miles under construction, making a grand total of work either completed or in hand of 10,265 miles. At the commencement of the year 1882-83 there were 9,961 miles of line open for traffic and 1,302 under construction, making a grand total of 11,263 miles either completed or in hand. During the year 1882-83, 290 miles were opened to traffic, and the commencement of 1,194 miles of new line was authorised. The present position, therefore, is that we have 10,251 miles of line open to traffic, and 2,332 miles either under construction or sanctioned for commencement in 1883-84. It is expected that 719 miles will be opened for public use during the year 1883-84, leaving 1,613 miles for completion in 1884-85 and subsequent years. Comparing, therefore, the commencement of the year 1881-82 with the commencement of 1883-84, it will be found that the amount of line either open or under construction has in two years been increased by 2,318 miles. An immense deal, of course, remains to be done, and I trust it may be possible in the future to push forward the construction of Railways at a more rapid pace than in the past. At the same time it may be held that the progress during the last two years has, on the whole, been fairly satisfactory.

BOMBAY CHAMBER OF COMMERCE, *7th June, 1883.*

The SECRETARY to GOVERNMENT, Revenue Department, Bombay.

SIR,—In the memorandum regarding the cultivation of wheat, &c., in the Bombay Presidency, including Sind, forwarded to the Chamber with your letter No. 7181, dated 14th October 1882, and in other papers issued by Government on the same subject, reference is made to the well-known fact that the relatively low price of Indian wheat in the London market is not so much due to its quality, which is generally very good, but to its admixture with dirt and other inferior grains, and that this admixture of inferior grains with the wheat is due to the fact that cultivators often grow other grains in the same field as wheat, as a resource in the event of the failure of the wheat crop.

As the trade in Indian wheat is rising to great importance, and as it is most desirable that this practice should be discontinued, and the position of Indian wheat improved in the markets of Europe, the Committee of the Chamber of Commerce desire me to request that His Excellency the Governor in Council may be pleased, in the interest of the country, to order the local officers of Government, in all districts where wheat is grown, to take whatever steps may be possible to prevent this admixture being resorted to.—I have, &c.,

J. GORDON, Secretary.

No. 4734.

REVENUE DEPARTMENT,
BOMBAY CASTLE, 23rd June, 1883.

Letter from the SECRETARY CHAMBER OF COMMERCE, dated 7th June, 1883 :—

"In the memorandum regarding the cultivation of wheat, &c., in the Bombay Presidency, including Sind, forwarded to the Chamber with your letter No. 7181, dated 14th October 1882, and in other papers issued by Government on the same subject, reference is made to the well-known fact that the relatively low price of Indian wheat in the London market is not so much due to its quality, which is generally very good, but to its admixture with dirt and other inferior grains, and that this admixture of inferior grains with the wheat is due to the fact that cultivators often grow other grains in the same field as wheat, as a resource in the event of the failure of the wheat crop.

"2. As the trade in Indian wheat is rising to great importance, and as it is most desirable that this practice should be discontinued, and the position of Indian wheat improved in the markets of Europe, the Committee of the Chamber of Commerce desire me to request that His Excellency the Governor in Council may be pleased, in the interest of the country, to order the local officers of Government in all districts where wheat is grown, to take whatever steps may be possible to prevent this admixture being resorted to."

RESOLUTION—Copies of the letter from the Chamber of Commerce should be forwarded to the Commissioner in Sind and the Commissioners of Divisions who should be requested to communicate the remarks of the Chamber of Commerce to the Collectors of wheat-producing districts in their respective Divisions and desire the Collectors to urge on wheat growers the importance in their own interests of preventing admixture with the wheat of dirt, other grain, or other foreign substance which leads to their obtaining for the wheat produced by them a lower price than they might otherwise secure.

2. Copies should also be forwarded to the Survey and Settlement Commissioner and the Political Officers in charge, Native States, where wheat is grown. A copy should be sent to Mr. E. C. Ozanne on his return to duty.

J. MONTEATH,
Acting Under-Secretary to Government.

BOMBAY CHAMBER OF COMMERCE, 30th June, 1883.

To the SECRETARY to GOVERNMENT, Revenue Department, Bombay.

SIR,—I am directed by the Committee of the Chamber of Commerce to acknowledge the receipt of Government Resolution No. 4734, dated the 23rd instant, and to request that you will be so good as

to convey to His Excellency the Governor in Council the thanks of the Chamber for his courteous compliance with their request. It does not seem, however, that a copy of this Resolution has been sent to the Chief Commissioner of the Central Provinces, where wheat is produced in such large quantities; and if such should be the case, the Committee respectfully suggest that Government send a copy to him, with a request that he will urge on wheat growers the importance in their own interests of preventing admixture with the wheat of dirt, other grain, or other foreign substance.

Whilst on this subject, the Committee desire also to suggest whether it would not have a good effect in improving the cultivation of wheat and preventing the admixture of inferior grains, if Government offered through its local officers, in the different wheat-growing districts, small prizes for the best farmed fields in which no other grains were grown.—I have, &c.,

J. GORDON, Secretary.

BOMBAY CHAMBER OF COMMERCE, *2nd July*, 1883.

The SECRETARY BENGAL CHAMBER OF COMMERCE.

DEAR SIR,—I am desired by the Committee of this Chamber to forward to you a printed copy of the Resolution of the Government of Bombay, in which they have issued orders to the Collectors to urge on wheat growers the importance, in their own interests, of preventing the admixture with the wheat of dirt, other grain, or other foreign substance, and to express their hope that your Chamber will kindly second their efforts to improve the quality of Indian wheat by requesting the various Governments on your side in whose provinces wheat is grown to issue similar orders.

This Chamber has also suggested to the Government of Bombay whether it would not have a good effect in improving the cultivation of wheat, and preventing the admixture of inferior grains, if Government offered through its local officers, in the different wheat-growing districts, small prizes for the best farmed fields in which no other grains were grown.—I have, &c.,

J. GORDON, Secretary.

BOMBAY CHAMBER OF COMMERCE, *2nd July*, 1883.

The SECRETARY KURRACHEE CHAMBER OF COMMERCE.

DEAR SIR,—I am desired by the Committee of this Chamber to forward to you a printed copy of the Resolution of the Government of Bombay, in which they have issued orders to the Collectors to urge on wheat growers the importance, in their own interests, of preventing the admixture with the wheat of dirt, other grain, or other foreign substance, and to express their hope that your Chamber will kindly second their efforts to improve the quality of Indian wheat.

This Chamber has also suggested to the Government of Bombay

whether it would not have a good effect in improving the cultivation of wheat, and preventing the admixture of inferior grains, if Government offered through its local officers, in the different wheat-growing districts, small prizes for the best farmed fields in which no other grains were grown.—I have, &c.,

J. GORDON, Secretary.

BENGAL CHAMBER OF COMMERCE, CALCUTTA, 6th August, 1883.

J. GORDON, Esq., Secretary Chamber of Commerce, Bombay.

DEAR SIR,—I beg to acknowledge the receipt of your letter of the 2nd of last month, forwarding copy of a Resolution by the Government of Bombay, relative to the improvement of the quality and condition of wheat for shipment to foreign markets, and to inform you that the Government of India, the Punjab, the North-Western Provinces, and of Bengal were addressed, with copies of the Resolutions referred to, on the 24th ultimo; and copy of my letter is added for your information.—I am, &c.,

H. W. J. WOOD, Secretary.

CALCUTTA, 24th July, 1883.

To the SECRETARY to the GOVERNMENT of INDIA, Department of Agriculture.

SIR,—I am directed by the Committee of the Chamber of Commerce to submit, for the consideration of His Excellency the Viceroy and Governor-General, the enclosed Resolution of the Government of Bombay on a representation by the Bombay Chamber relative to the expediency of steps being taken to urge upon growers of wheat the importance, in their own interests, of preventing admixture with the wheat of other grain or foreign substances and impurities which tends to lower prices being obtained than might otherwise be secured.

In placing this matter before His Excellency, the Committee direct me to express their hope that similar orders may be issued by the Government of India to Commissioners or other authorities of districts where wheat is cultivated for exportation.

It has also been suggested that the cultivation of wheat would be improved and the admixture of inferior grains prevented if Government were to offer through local officers in the wheat-growing districts small prizes for the best farmed field in which no other grains were grown, and the Committee of the Chamber venture to recommend the suggestion to His Excellency's notice.—I have, &c.,

H. W. J. WOOD, Secretary.

KURRACHEE CHAMBER OF COMMERCE, 11th July, 1883.

To the SECRETARY BOMBAY CHAMBER of COMMERCE.

DEAR SIR,—The Managing Committee in acknowledging receipt of your letter of 2nd July, and its accompaniment, desire me to thank you for the same, and in reply to say that this Chamber shall have much pleasure in seconding the efforts of your Chamber to improve the quality of Indian wheat.

The Committee have, however, already directed the attention of His Honor the Lieutenant-Governor of the Punjaub to the subject of your communication in a letter they had occasion to address to him lately, copy of which is herewith enclosed for perusal.

And as the question of admixture is one which affects the export trade of this port very seriously (involving, as it does, heavy charges for garbling and winnowing the seed prior to shipment), the Committee would gladly further any effort which would aid in preventing the same.

The Committee also desire me to say that they heartily approve of the suggestion made in the concluding para. of your letter.—I remain, &c.,

J. GRANT, Chairman.

KURRACHEE CHAMBER OF COMMERCE, 17th February, 1883.

To Sir CHARLES AITCHISON, K.C.S.I., C.I.E., Lieutenant-Governor of the Punjaub.

SIR,—I am desired by the members of the Kurrachee Chamber of Commerce to convey to your Honor an expression of the appreciation with which they regard the publication of the recent Resolution of the Punjaub Government, in the Public Works Department, on the subject of the Punjaub wheat trade; and in accordance with their wishes, I beg to submit herewith an extract from the proceedings of a Special General Meeting held by the Chamber on Saturday the 3rd February, when the above Resolution formed the subject of discussion.

The members of the Chamber have especially to thank your Honor for the reference made to this port as "the natural outlet of the Punjaub," and they heartily welcome the powerful co-operation of your Government in so warmly advocating the execution of such important measures as the branch line of railway from Raewind to Ganda Singhwalla, the Sukkur Bridge, and particularly those which have special reference to Kurrachee Harbour.

The members greatly acknowledge also the many valuable and practicable suggestions made by your Government, with the view to the development of the trade of your province with this port.

From the active interest evinced by your Government in the development of the trade of the Punjaub, and from the important

acknowledgment of this port as "the natural outlet of its surplus produce," the members anticipate large and beneficial results. The above statement regarding Kurrachee is particularly gratifying to them, as it has been the aim and object of this Chamber, for many years past, to secure for this port the trade which should naturally pass through it.

This latter remark has special reference to the Punjab wheat trade, the importance of which was early recognised by this Chamber, which was the first public body to urge on the Government of India the abolition of the Imperial Export Duty; and which has already, in some measure, contributed to the development of this trade, having, among other reforms, brought about the abolition of the local Octroi duty on wheat; with what results, the large exports of wheat from this port during the last few years bear striking evidence. The members look, therefore, with much satisfaction upon any measures which will aid in the further development of the Wheat trade between the Punjab and this port.

With regard to the suggested encouragements to be afforded the import trade, I am to say that the adoption of any measure which will enable this port to supply the markets of the Punjab will tend greatly to the furtherance of their efforts to regain the trade diverted from Kurrachee since the opening of the Rajpootana line. In regard to this point, however, the subsidising of steamers as an inducement to give the Kurrachee trade a preference is not, in the opinion of the members, at all expedient; as the difficulty with regard to tonnage has very much decreased as the export trade of the port has increased.

With respect to the disadvantages at Kurrachee as enumerated in the said Resolution, the members would beg respectfully to point out that certain statements made therein in reference to the charges for cartage and cleaning of seed sent hither for shipment are hardly consistent with fact. These charges, represented as excessive, would, in the opinion of the members, be very nearly the same at any other place where the seed underwent the same process of cleaning before export as it does in Kurrachee. If the cleaning of the seed be at all a necessity, the question then arises, where this cleaning can best be effected, with the greatest convenience and economy; and since, as a matter of course, the wheat grown in all the outlying districts requires to be collected at the various centres of traffic, and thence conveyed to the port of shipment, that point would naturally suggest itself as the place where the grain could best be prepared for export; having, as it then would, the personal supervision of the exporter.

These remarks would particularly apply to Kurrachee, where, owing to the steady sea-breeze and other climatic advantages, seed cleaning is carried on very satisfactorily: this, too, may probably be the reason why the process has been uninterruptedly maintained here for many years.

It is suggested that as a means to diminish the cartage charges, cleaned seed should be purchased at dépôts up-country, and be sent straight out to the shipping, over the Pier on Keamaree Island. The purchase of cleaned seed from the cultivators does not, however, preclude the necessity of having it garbled again, owing to the

admixture of gram, barley, jowaree, and other grains, found in all the wheat received from up-country. This admixture, the members believe, to be chiefly due to a want of care on the part of the cultivators when sowing and gathering, and I am to respectfully suggest that when the attention of the cultivators is drawn to such portions of the Resolution as have reference to them, the above fact may also be brought to their notice.

With reference to the conveyance of the cleaned seed straight out to the shipping, the members very much regret that the scheme is in a great measure impracticable, inasmuch as the limited space at Keamaree would ill accommodate so extensive a business as that in question. Moreover, the nature of this suggestion may be judged from the fact that its realisation would involve the transfer of the entire business quarter of the town to Keamaree,—distant three miles from Kurrachee,—and that at a vast sacrifice of vested capital in the shape of merchants' offices and warehouses, as well as public buildings.

With respect to the charges for cartage, I have the honour to inform your Honor, however, that the introduction into this city, very shortly, of a system of steam Tramways will greatly facilitate the carriage of merchandise to the bunders; and were the Sind, Punjaub and Delhi Railway Company prevailed upon to provide additional accommodation at the city station in the shape of warehouses, &c., where the buying, selling, and selection of the produce could be effected, the cartage from the station to the town, and thence to the godowns of the European merchants, would thereby be, to a great extent, saved.

In conclusion, the members are very hopeful that the efforts shortly to be put forth in the direction of the harbour improvements will result in the removal of the existing disadvantages at this port, and in enabling it to meet more fully the requirements of the trade, which in common with the Government of the Punjaub, the Chamber is resolved to do all that lies in its power to foster and extend.—I have, &c.,

J. GRANT, Chairman.

No. 5731.

REVENUE DEPARTMENT,
BOMBAY CASTLE, 2nd August, 1883.

Letter from the SECRETARY to the CHAMBER of COMMERCE, Bombay, dated 30th June 1883 :—

"I am directed by the Committee of the Chamber of Commerce to acknowledge the receipt of Government Resolution No. 4734, dated the 23rd instant, and to request that you will be so good as to convey to His Excellency the Governor in Council the thanks of the Chamber for his courteous compliance with their request. It does not seem, however, that a copy of this Resolution has been sent to the Chief Commissioner of the Central Provinces, where wheat is produced in such large quanti-

ties ; and if such should be the case, the Committee respectfully suggest that Government send a copy to him, with a request that he will urge on wheat growers the importance, in their own interests, of preventing admixture with the wheat of dirt, other grain, or other foreign substance.

“ Whilst on this subject, the Committee desire also to suggest whether it would not have a good effect in improving the cultivation of wheat and preventing the admixture of inferior grains, if Government offered through its local officers, in the different wheat-growing districts, small prizes for the best farmed fields in which no other grains were grown.”

Letter from the Commissioner, S. D., No. 1397, dated 6th July 1883—
Submitting his remarks, with reference to Government Resolution No. 4734, dated 23rd ultimo, on the subject of the admixture of other grains and dirt with the wheat grown in this Presidency, brought to notice by the Chamber of Commerce.

RESOLUTION.—A copy of the Resolution referred to should, as suggested by the Chamber of Commerce, be sent to the Chief Commissioner, Central Provinces, with a request that, if he sees no objection, instructions may be issued to the officers in charge of wheat-producing districts in those provinces to the effect proposed by the Chamber of Commerce in their letter quoted in the preamble of the Resolution.

2. With reference to the admixture of wheat with other grains complained of by the Chamber, that body may be furnished with a copy of the letter since received from the Commissioner, S. D., No. 1397, dated 6th July 1883. The Chamber will perceive from the extracts given in it that the Bombay wheats are favourably pronounced upon both as regards their quality and freedom from other grains.

3. It is, however, very desirable that every effort should be made to fully improve the position of the grain in the markets of Europe, and it seems to Government that such efforts should properly proceed from those who are directly interested in the development and success of the trade.

4. The remarks in paragraph 7 of the Commissioner's letter are deserving of attention, and much good will be done if the Chamber can adopt measures to prevent the practice therein referred to.

J. MONTEATH,
Acting Under-Secretary to Government.

POONA, 6th July, 1883.

From ARTHUR CRAWFORD, Esq., Commissioner, S. D., to J. NUGENT, Esq., Secretary to Government.

SIR,—On receipt of Government Resolution No. 4734 of the 23rd ultimo, I addressed the Collectors of my division, as desired by Government, on the subject of preventing admixture of wheat with dirt, other grain, or other foreign substance.

2. Since then, however, my attention has been attracted to an im-

portant paper on Indian wheats in the *Economist* (England) of the 9th June last. It appears that the well-known firm of Messrs. McDougall Brothers were called upon by the Secretary of State to report on Indian wheats, large samples of which were supplied to them. In their report on the experiments made by them, Messrs. McDougall Brothers make the following remark :—

“ The Indian wheats now specially under review were delivered to us in excellent condition (see details) with freedom from dirt (except lot No. 3), barley grain, and other impurities.”

3. The report of these experts does not support the complaint of the Bombay Chamber of Commerce, and I may add that my own inquiries in Bombay, and my personal knowledge of the growth of wheat in a considerable part of this Presidency, lead me to believe that the dirty wheats of which the Chamber complains really came from the North-West, from Agra or anywhere, than from this Presidency.

4. I am credibly informed that the percentage of foreign substance and dirt found in Bombay is not considerable. It would at any rate have been satisfactory if the Chamber had stated what it is.

5. The “ other grains ” grown “ in the same field with wheat ” do not ordinarily ripen, and are not harvested till after the wheat is reaped and stacked before threshing out. The cultivator of this Presidency is remarkably careful and cleanly at the threshing floors, which are fresh, coudunged before each crop is laid down for threshing, and each crop is carefully and separately threshed.

6. The dirty condition of the wheats exported from Calcutta is, on the other hand, as notorious as is the slovenly husbandry of the masses of the ryots in the immense wheat-growing plains along the East Indian Railway.

7. The Revenue officers of this Presidency will, I am sure, do their best in this, as in all other matters, to improve the staples of the country, but the Chamber of Commerce and the merchants of Bombay can effect a great deal more by stricter supervision of their own agents who buy for them up-country, and by *combining to prevent the mixing up in Bombay itself of different wheats of different qualities from different parts of India*. This mixing up is, I am credibly informed, becoming common, and the clean wheat of the Bombay Presidency will, year by year, run a greater risk of being mixed up with the dirty wheats of the North-West, and because the mixtures will be shipped from Bombay, Bombay-grown wheat will undeservedly get a bad name.

8. Another passage in the paper of the *Economist* merits special notice. Messrs. McDougall Brothers speak of “ the measureless importance of the great resources of the Indian Empire being developed to the utmost in producing wheat for this country.”

9. Much the same language has been used of late by the highest officials in India regarding the Indian wheat trade.

10. Much the same language was used by the Government of India in 1861 regarding the cotton production of India, and the Government of India then placed very considerable sums* at the disposal of the

* Rs. 10,000 per annum for three years in Bombay.

Local Government, to be expended on prizes and rewards for improved cotton cultivation.

11. I venture to suggest that the Imperial Government should make similar grants for the improvement of wheat cultivation, the wheat trade promising to be of far greater imperial importance than that of cotton ever was.—I have, &c.,

ARTHUR CRAWFORD, Commissioner, S. D.

BOMBAY CHAMBER OF COMMERCE, *2nd October, 1883.*

To the UNDER-SECRETARY to GOVERNMENT, Revenue Department, Bombay.

SIR,—I am directed to acknowledge the receipt of Government Resolution No. 5731, dated 2nd August, accompanied by a copy of a letter dated 6th July 1883, from the Commissioner, Southern Division, on the subject of the admixture of dirt, other grain, or other foreign substances with wheat.

The Committee regret that they cannot concur in the views expressed by the Commissioner on this subject.

The remark extracted from the report of Messrs. McDougall Brothers, referred to in para. 2 of his letter, is, in so far as it goes, correct, but Messrs. McDougall themselves say, in another part of their report, that the samples were much cleaner and freer from impurities than these wheats generally are.

Advices from the European markets state that the complaint this year has been that the Bombay wheats have more dirt in them than usual.

The greater proportion of the wheat exported from Bombay comes from the Central Provinces, and the remarks and suggestions of the Chamber on the qualities produced in those districts will be more properly addressed to the Government of the Central Provinces.

The wheats grown in the Bombay Presidency, and exported from Bombay, chiefly come from Khandeish (which are almost entirely hard wheats), and from Guzerat, chiefly from Ahmedabad and adjoining districts (which are almost entirely soft red wheats). There is very little soft white wheat grown in the Bombay Presidency which is suitable

for export to Europe. The Committee can only presume that the soil is not so suitable for the production of this description, and that the standard export qualities of hard and soft red wheats give a better return to the cultivator. Still if experiments could be made tending to show that the fine white wheats of the Central Provinces could be grown to advantage in the Bombay Presidency an important addition to the production of the Presidency might be made.

The soft red wheats from Ahmedabad and the adjoining districts are tolerably free from all admixtures of foreign substances, but the quality would be much improved and command a higher value if it was entirely free from barley.

The hard wheats of the Khandeish and Nassick districts are much esteemed in the south of Europe, and the "*Bunsee*" quality could hardly be improved on, but the hard Peela and Lascari wheats of these districts have generally an admixture of soft red or soft white grains, which depreciate the value of these wheats. By some it is thought that this is more apparent after seasons of excessive and late rainfall; but the Committee are not able to express an opinion as to whether excessive rain has such a tendency, and are more inclined to believe that the admixture arises from the sowing of seed of soft wheat, to some extent, mixed with the hard wheat seed. The Committee cannot concur in the Commissioner's remarks on the North-West, Agra and Delhi wheats, which now to a large extent find their way to Bombay by the Rajputana and Baroda Railways; these wheats are not by any means dirtier than the ordinary wheats of the Bombay Presidency and Central Provinces; the Committee would say that they are rather cleaner—their drawback is the amount of barley which is mixed with them.

Neither can the Committee concur in the view expressed in para. 5 of the Commissioner's letter. If the other grains, such as barley, gram, &c., which are found mixed with the wheats on arrival at the up-country and Bombay markets are grown, as the Committee believe, in the same fields as the wheat and amongst the wheat, they would be sickled at the same time. The quantity of the grains other than wheat found mixed with it is not of sufficient importance to warrant the idea that anything more occurs than a slight admixture of other grains at the time of

sowing, probably owing to the seed grain not being carefully selected.

The Committee are unable to say whether any adulteration goes on by the buyer of the crop after it is reaped, but they would be inclined to think that it does not to any great extent, as it is against his own interest to do so; but if the Commissioners are of opinion that adulteration does take place by the middlemen, steps should be taken to show them that the course is against their own interests, and that by delivering their crops at the various large marts in a cleaner and less adulterated state they would obtain higher prices.

The Committee agree with Government that those more particularly interested in the export of wheat should use every effort for the development and success of the trade. By the custom of cleaning wheat in Bombay, Bombay wheat, as a rule, arrives at home in much better condition than that from Calcutta. But the merchants can only check the evil of admixture by paying a higher price for clean samples, which they do, and a lower price for mixed and dirty ones: they also instruct their up-country agents to the same effect. There are, however, certain native merchants in Bombay whose trade is to mix up wheats,—inferior with good,—and they occasionally catch unwary buyers in an active market, who have to pay the penalty at home for their want of care, and who, taught by experience, seek to prevent similar occurrences in future.

While, however, these efforts are being made by the trade, the mercantile community look to Government for assistance in improving the quality of Indian wheat by adoption of measures calculated to induce a more careful and systematic cultivation, which, on account of the imperial importance of the trade, the Government, it seems to the Chamber, are bound to encourage.

The Committee would therefore specially request the attention of Government to the evil of growing hard and soft wheats together. The former are greatly in request at all the Mediterranean ports, but when mixed with soft grains of the same description the shipments are either rejected altogether, or mulcted with such heavy allowances as to check the business almost entirely. English millers also strongly object to admixture of hard and soft wheats. In the same way the value of the soft white wheat crops

would be increased if they were freer from red and also hard grains. Should it be desired by Government, the Committee would forward to Government selected samples of the different suitable qualities of wheat which are at present exported from Bombay, and which are known to be produced in the districts of Guzerat, Khandeish, and Nassick, so that, if Government consider it desirable, samples of the same might be distributed, to show the growers the qualities which are required for export and which will command the highest prices.

With the view of improving the cultivation of wheat and preventing admixture, the Committee have already suggested that prizes should be given for the best-farmed fields, but they would in addition respectfully suggest that stringent orders should be given to all subordinate European or native Revenue Officers by the various Collectors to make known in every village, either by playcard, advertisement, or batak, or by personal influence, the advantage to cultivators of reaping pure and unmixed grain, and the advantage of separating at seed time the soft from the hard grains, the white from the red, and of sowing them in separate fields.

The Committee, though unable to ascertain to what extent the rainfall at certain periods of growth has an effect in rendering the wheat hard or soft, are nevertheless strongly of opinion that if the seed grain were carefully selected, and all hard wheat taken out of seed grain intended to be sown for soft wheat, and all soft grain taken out from what was intended to be hard, the crops would be much less liable to come up mixed. It is a question whether any Government expenditure could be better laid out than in supplying cultivators gratis, for a year or two, with pure soft white, soft red, and hard wheat for sowing: a large amount of pure qualities of each description could be supplied for Rs. 10,000 every year, and the Chamber of Commerce could supplying the Bombay Government, in a reasonable time, with quantities of absolutely pure wheat of each description, for distribution to the ryots, if Government would bear the necessary expense of hiring godowns for the purpose, of hiring women for the purpose of picking out all grains of a different description, and of buying the purest lots of wheat in the first instance for the operation.

The Committee suggest that Government should give

Rs. 10,000 for this object in the first year, which the Chamber might supplement from its funds to the extent of, say, Rs. 1,000. The question would arise—Could the Government guarantee that when the selected grain was distributed it would be sown? If so, the Committee believe that an enormous improvement would result, that the ryots would see the advantage to themselves of adopting the same course from the higher prices they would get for their grain, and that in future seasons they might do it to a great extent of their own accord. In the opinion of the Chamber, nothing at first but a liberal expenditure of Government money and exercise of influence on the cultivators will work any real improvement, and there is every probability that if the seed grain is not improved within the next year or two the admixture of hard grain with soft, and red grain with white,* and *vice versâ*, will go on increasing, and the seed sown will every year be getting more mixed and more difficult to improve.

In conclusion, the Chamber would request that all papers in connection with this matter should also be sent to the Commissioners of the Northern and Central Divisions of the Presidency, as it is from their Divisions that the bulk of the wheat grown in the Bombay Presidency, exported from here, comes.—I have, &c.,

JAMES THORBURN, Chairman.
J. GORDON, Secretary.

No. 8742 OF 1883.

REVENUE DEPARTMENT,
BOMBAY CASTLE, 29th November, 1883.

Letter from the SECRETARY, CHAMBER OF COMMERCE, Bombay, dated 2nd October 1883 :—

"I am directed to acknowledge the receipt of Government Resolution No. 5731, dated 2nd August, accompanied by a copy of a letter, dated 6th July 1883, from the Commissioner, Southern Division, on the subject of the admixture of dirt, other grain, or other foreign substances with wheat.

"2. The Committee regret that they cannot concur in the views expressed by the Commissioner on this subject.

"3. The remark extracted from the report of Messrs. McDougall Brothers, referred to in paragraph 2 of his letter, is, in so far as it goes, correct, but Messrs. McDougall themselves say, in another

part of their report, that the samples were much cleaner and freer from impurities than these wheats generally are.

"4. Advices from the Europeans markets state that the complaint this year has been that the Bombay wheats have more dirt in them than usual.

"5. The greater proportion of the wheat exported from Bombay comes from the Central Provinces, and the remarks and suggestions of the Chamber on the qualities produced in those districts will be more properly addressed to the Government of the Central Provinces.

"6. The wheat grown in the Bombay Presidency, and exported from Bombay, chiefly come from Khandesh (which are almost entirely hard wheats), and from Gujarat, chiefly from Ahmedabad and adjoining districts (which are almost entirely soft red wheats). There is very little soft white wheat grown in the Bombay Presidency which is suitable for export to Europe. The Committee can only presume that the soil is not so suitable for the production of this description, and that the standard export qualities of hard and soft red wheats give a better return to the cultivator. Still if experiments could be made tending to show that the fine white wheats of the Central Provinces could be grown to advantage in the Bombay Presidency an important addition to the production of the Presidency might be made.

"7. The soft red wheats from Ahmedabad and the adjoining districts are tolerably free from all admixtures of foreign substances, but the quality would be much improved and command a higher value if it was entirely free from barley.

"8. The hard wheats of the Khandesh and Nasick Districts are much esteemed in the south of Europe, and the *Bunsee* quality could hardly be improved on, but the hard Peela and Lascari wheats of these districts have generally an admixture of soft red or soft white grains, which depreciate the value of these wheats. By some it is thought that this is more apparent after season of excessive and late rainfall; but the Committee are not able to express an opinion as to whether excessive rain has such tendency, and are more inclined to believe that that the admixture arises from the sowing of seed of soft wheat, to some extent, mixed with the hard wheat seed. The Committee cannot concur in the Commissioner's remarks on the North-West, Agra and Delhi wheats, which now to a large extent find their way to Bombay by the Rajputana and Baroda Railways; these wheats are not by any means dirtier than the ordinary wheats of the Bombay Presidency and Central Provinces; the Committee would say that they are rather cleaner—their drawback is the amount of barley which is mixed with them.

"9. Neither can the Committee concur in the view expressed in paragraph 5 of the Commissioner's letter. If the other grains, such as barley, gram, &c., which are found mixed with the wheats on arrival at the up-country and Bombay markets are grown, as the Committee believe, in the same fields as the wheat and amongst the wheat, they would be sickled at the same time. The quantity of the grains other than wheat found mixed with it is not of sufficient importance to warrant the idea that anything more

occurs that a slight admixture of other grains at the time of sowing, probably owing to the seed grain not being carefully selected.

"10. The Committee are unable to say whether any adulteration goes on by the buyer of the crop after it is reaped, but they would be inclined to think that it does not to any great extent, as it is against his own interest to do so; but if the Commissioners are of opinion that adulteration does take place by the middlemen, steps should be taken to show them that the course is against their own interests, and that by delivering their crops at the various large marts in a cleaner and less adulterated state they would obtain higher prices.

"11. The Committee agree with Government that those more particularly interested in the export of wheat should use every effort for the development and success of the trade. By the custom of cleaning wheat in Bombay, Bombay wheat, as a rule, arrives at home in much better condition than that from Calcutta. But the merchants can only check the evil of admixture by paying a higher price for clean samples, which they do, and a lower price for mixed and dirty ones: they also instruct their up-country agents to the same effect. There are, however, certain native merchants in Bombay whose trade is to mix up wheats—inferior with good—and they occasionally catch unwary buyers in an active market, who have to pay the penalty at home for their want of care, and who, taught by experience, seek to prevent similar occurrences in future.

"12. While, however, these efforts are being made by the trade, the mercantile community look to Government for assistance in improving the quality of Indian wheat by adoption of measures calculated to induce a more careful and systematic cultivation, which, on account of the imperial importance of the trade, the Government, it seems to the Chamber, are bound to encourage.

"13. The Committee would therefore specially request the attention of Government to the evil of growing hard and soft wheats together. The former are greatly in request at all the Mediterranean ports, but when mixed with soft grains of the same description the shipments are either rejected altogether, or mulcted with such heavy allowances as to check the business almost entirely. English millers also strongly object to admixture of hard and soft wheats. In the same way the value of the soft white wheat crops would be increased if they were freer from red and also hard grains. Should it be desired by Government, the Committee would forward to Government selected samples of the different suitable qualities of wheat which are at present exported from Bombay, and which are known to be produced in the districts of Gujarat, Khandesh, and Nasik, so that if Government consider it desirable, samples of the same might be distributed, to show the growers the qualities which are required for export and which will command the highest prices.

"14. With the view of improving the cultivation of wheat and preventing admixture, the Committee have already suggested that prizes should be given for the best farmed fields, but they would in addition respectfully suggest that stringent orders should be given to all subordinate European or native Revenue Officers by the

various Collectors to make known in every village, either by placard, advertisement, or batak, or by personal influence, the advantage to cultivators of reaping pure and unmixed grain, and the advantage of separating at seed time the soft from the hard grains, the white from the red, and of sowing them in separate fields.

"15. The Committee, though unable to ascertain to what extent the rainfall at certain periods of growth has an effect in rendering the wheat hard or soft, are nevertheless strongly of opinion that if the seed grain were carefully selected, and all hard wheat taken out of seed grain intended to be sown for soft wheat, and all soft grain taken out from what was intended to be hard, the crops would be much less liable to come up mixed. It is a question whether any Government expenditure could be better laid out than in supplying cultivators gratis, for a year or two, with pure soft white, soft red, and hard wheat for sowing: a large amount of pure qualities of each description could be supplied for Rs. 10,000 every year, and the Chamber of Commerce could supply the Bombay Government, in a reasonable time, with quantities of absolutely pure wheat of each description, for distribution to the rayats if Government would bear the necessary expense of hiring godowns for the purpose of picking out all grains of a different description, and of buying the purest lots of wheat in the first instance for the operation.

"16. The Committee suggest that Government should give Rs. 10,000 for this object in the first year, which the Chamber might supplement from its funds to the extent of, say, Rs. 1,000. The question would arise, could the Government guarantee that when the selected grain was distributed it would be sown? If so, the Committee believe that an enormous improvement would result, that the rayats would see the advantage to themselves of adopting the same course from the higher prices they would get for their grain, and that in future seasons they might do it to a great extent of their own accord. In the opinion of the Chamber, nothing at first but a liberal expenditure of Government money and exercise of influence on the cultivators will work any real improvement, and there is every probability that if the seed grain is not improved within the next year or two the admixture of hard grain with soft, and red grain with white, and *vice versa*, will go on increasing, and the seed sown will every year be getting more mixed and more difficult to improve.

"17. In conclusion, the Chamber would request that all papers in connection with this matter should also be sent to the Commissioners of the Northern and Central Divisions of the Presidency, as it is from their Divisions that the bulk of the wheat grown in the Bombay Presidency, exported from here, comes."

RESOLUTION.—Copies of the further letter from the Chamber of Commerce should be forwarded to the Commissioner in Sind and the Commissioners of Divisions in continuation of Government Resolution No. 4734, dated 23rd June 1883, with a request that they will call the attention of the Collectors of wheat-producing districts in their respective divisions to paragraphs 10, 12, 14 and 15 of the letter with a view to giving effect as far as practicable to the suggestions contained therein. Copy of the letter should also be forwarded with reference to previous correspondence to the Chief Commissioner, Cen-

tral Provinces, for such action as may be deemed necessary in regard to the wheat-producing districts in those provinces.

2. His Excellency in Council fully recognises the propriety of Government taking measures for improving the quality of the wheat grown in this Presidency, and is prepared to spend a moderate sum from the public revenues for this object. The subject should be actively taken up by the Director of Agriculture, who should distribute useful information among the producers and intermediate agents who deal with the wheat crop and place before them samples of the wheats which are most in demand for export, and should also supply seed of pure quality gratis or at a low rate to selected cultivators in the wheat-growing districts with suitable precautions that it is used to the best advantage. Small prizes may also be awarded for the most approved cultivation. A sum not exceeding Rs. 10,000 may be appropriated yearly in this way until further notice and the action taken in the matter should be carefully reported by the Director from time to time. The Director should maintain communication with the Chamber of Commerce on this important subject and any sum which the Chamber may appropriate to the same objects may probably be best expended under the Director's supervision.

J. MONTEATH,
Acting Under-Secretary to Government.

BOMBAY CHAMBER OF COMMERCE, 20th December, 1883.

THE ACTING UNDER-SECRETARY TO GOVERNMENT, Revenue Department, Bombay.

SIR,—I am directed by the Committee of the Chamber of Commerce to acknowledge the receipt of Government Resolution No. 8742, dated 29th November 1883, on the subject of the admixture of dirt, other grain, or other foreign substances with wheat; and to ask you to be so good as to convey the thanks of the Chamber to His Excellency the Governor in Council for the grant of Rs. 10,000 which he has authorised for improving the quality of the wheat grown in this Presidency, and for his having entered so fully into the views of the Chamber.—I have, &c.,

J. GORDON, Secretary.

No. 5086 OF 1883.

From G. F. SHEPPARD, Esq., Commissioner, N.D., to the COLLECTORS in GUZERAT.

CAMP, SURAT, 3rd November, 1883.

SIR,—Although the class and character of the wheats exported from this country have greatly improved, yet, as you are doubtless aware, there are complaints that inferior prices are realised owing to want of care in keeping the several varieties separate. Whether this is caused by a mixture of seed, or in the storing or transport of the

grain, I have been unable to ascertain positively, but in all probability it is due to the former cause.

2. The subject is a really important one, and I would suggest your notifying in your wheat producing localities that whatever variety is grown the first great requirement is that the whole produce should be of that one variety, mixed wheats losing much value in the market.

3. It is found that the system of picking and cleaning the seed, before sowing, is productive of the best results. All grains of other varieties can thus be removed, together with small, broken, discolored grains, and your cultivators will probably find that the larger and more valuable produce will more than repay them for the trouble entailed by this operation.

4. I append extract from a report by an intelligent native gentleman from Shahjahanpur on this subject.—I have, &c.,

G. F. SHEPPARD, Commissioner, N. D.

Extract para. 5 from a report which appeared in the "Indian Agriculturist" of the 1st August 1883, page 296.

"5. I am also now in a position to state my opinion as to the utility of picking the seed before sowing it. All the soft white wheat seed that was sown at Indalpore last year was carefully cleaned and picked before it was taken to the field. The fields sown with the seed so treated beat the other fields sown with the same sort of wheat without the special treatment. In those sown with the picked seed the produce was fully double that given by the fields in which the ordinary *Katha* wheat was sown. Not only was the outturn larger in quantity, but it was also better in quality. The grain produced by the picked seed is larger, whiter and better flavoured than that produced by the ordinary method of sowing. So far as this experiment goes, I can confidently state that picking and cleaning the seed before sowing is one of the essentials that result in the production of large outturns of extra superior quality."

No. 5487 OF 1883.

CAMP KAIRA, 5th December, 1883.

Forwarded to the Secretary Chamber of Commerce, Bombay, with compliments.

F. SHEPPARD, Commissioner, N. D.

APPENDIX F.

QUALITY OF INDIAN WHEAT.

No. 63-A.

REVENUE AND AGRICULTURAL DEPARTMENT (AGRICULTURE).

From T. W. HOLDERNESS, Esq., Officiating Under-Secretary to the Government of India, to the SECRETARY CHAMBER OF COMMERCE, Bombay.

SIMLA, 25th August, 1883.

SIR,—I am directed to forward, for such use as you may wish to make of it, a copy of a report on Indian wheat received from Her Majesty's Secretary of State for India.—I have, &c.,

T. W. HOLDERNESS,
Offg. Under-Secretary to Government of India.

No. 7137.

REVENUE DEPARTMENT,
BOMBAY CASTLE, 24th September, 1883.

Circular letter from the OFFICIATING UNDER-SECRETARY to the GOVERNMENT of INDIA, Revenue and Agricultural Department, No. 62-A., dated 25th August 1883—Forwarding copy of the following despatch No. 91, Statistics and Commerce, dated 14th June last, from HER MAJESTY'S SECRETARY OF STATE for INDIA :—

" 1. I forward herewith one hundred copies of a report on Indian wheat with despatch, remainder through Store Department. at my request by Messrs. McDougall Brothers, the well-known steam millers of 10 Mark Lane, London.

" 2. The report is of the greatest interest and value as showing that Indian wheats afford a larger margin of profit both to the miller and baker in this country than any others in the European markets ; and it should be made as widely known as possible in India."

RESOLUTION.—Copy of the report by Messrs. McDougall Brothers, of 10 Mark Lane, London, should be placed on the Editors' table and one copy each should be sent to the Bombay and Kurrachee Chambers of Commerce,

2. The report is a valuable one, and His Excellency in Council desires that the Collectors and Political Officers in charge of wheat-producing districts will take steps to make the contents of it, when

it appears in the newspapers, known as widely as possible within the limits of their respective charges.

J. MONTEATH,
Acting Under-Secretary to Government.

REPORT ON INDIAN WHEAT BY McDougall Brothers.

To the SECRETARY of STATE for INDIA.

MY LORD,—We have the honour to report upon the Indian wheats comprised in the four lots delivered to us by your brokers, Messrs. Harris Brothers & Co., which we have operated upon according to instructions contained in your Lordship's communications to us of 8th October and 25th October 1880, and supplemented by the verbal instructions made to us (we beg to refer to these communications and to our replies of 22nd October, 26th October, and 24th November 1880). These instructions were to the effect—

I. That we should take a given quantity of each of these four representative Indian wheats, viz.,—

Indian, fine soft white,
" superior soft red,
" average hard white,
" " " red,

and manufacture them into flour by the ordinary process of grinding under millstones. Also that we should take similar quantities of the same wheats and manufacture them into flour by means of crushing between rollers, according to the system known as the Hungarian or roller system.

II. That we should take a given quantity of each flour so produced and manufacture it into bread.

III. That we should note the qualities and other characteristics of the flours produced, also of the offals, viz., middlings, pollard, and bran.

IV. That we should procure the following representative wheats, of fair average quality of the season, as then being sold on Mark Lane market, and, for the purpose of obtaining results for comparison, deal with them precisely as above indicated, both as regards flour, bread, and offals, viz. :—

English average.
American (red winter).
" (spring).
Australian average.
Californian "
Russian, Saxonska.
" Taganrog.
" Kubanka.
" Ghirka.
Egyptian, Buhi.
" Saidia.

Note.—Of the two latter qualities of Russian wheats, Kubanka and Ghirka, none was to be obtained in London or other English markets, and consequently cannot be included in this report.

These operations have all been carried out in our own mills and

bakeries with due care and precision, and under the personal supervision of one of the members of our firm, during the whole period occupied until their completion.

We beg to report as follows :—

The quantity of each wheat operated upon by each system of milling was 5,000 lbs., as delivered from the ship (weight of sacks or bags not included).

The results obtained are stated in the following tables, which are followed by tabulated synopsis for convenience of ready comparison :—

WHEAT.

Lot 1.—Indian, fine soft white.

Quality—Fine soft white. (White, medium sized, skin thin, clean, and regular, free from seeds ; 2 per cent. weevilled ; handled exceedingly well.)

Value in London, 49s. per 496 lbs.

Weight per bushel, 64 lbs. (This weight is only equalled by specially fine samples of any wheat.)

Weight of 100 separate grains of the wheat, 55·4 grains avoirdupois. (100 weevilled grains weighed only 39·69 grains avoirdupois.)

1. *System.*—Grinding under millstones.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as ... 100'00 p. ct.

Impurities removed ... 1'52 "

98'48 "

Water absorbed to render mellow ... 2'00 "

100'48 "

Yield : flour	...	77'46	"	(A high yield, fine white colour, and superior bloom.)
" middlings	...	'82	"	
" pollard	...	8'80	"	
" bran	...	12'00	"	

99'08 "

Evaporation and loss ... 1'40 " (See Notes, page 368.)

100'48 "

Gluten, by water test, when damp ... 16'4 "

Ditto, ditto, when dry ... 6'4 "

2. *System.*—Crushing between rollers.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as ... 100'00 "

Impurities removed ... 1'52 "

98'48 "

Water absorbed to render mellow ... 2'00 "

100'48 "

Yield: flour	...	72.2	p. ct.	(An exceedingly high
„ dark ditto...	...	1.9	„	yield, fine white
		74.1	„	colour, and superior
„ middlings	...	11.0	„	in bloom.)
„ pollard	...	8.7	„	
„ bran	...	4.0	„	
		97.8	„	
Evaporation and loss	...	2.68	„	(See Notes, page 368.)
		100.48	„	
Gluten, by water test, when				
damp ..	...	20.2		
Ditto, ditto, when dry	...	6.8		

Lot 2.—Indian, superior soft red.

Quality—Superior soft red. (Colour dull light brown, with about 5 per cent. white wheat; size half medium and half small; skin thin; weevil only a trace; clean and free from seed; handled well.)

Value in London, 45s. per 496 lbs.

Weight per bushel, 62½ lbs. (Good.)

Weight of 100 separate grains of the wheat, 51.8 grains avoirdupois.

1. *System.*—Grinding under millstones.

Quantity operated upon, 5,000 lbs.

Enter quality treated as ... 100.0 p. ct.

Impurities removed 72 „

99.28 „

Water absorbed to render
mellow... .. 3.60 „

102.88

Yield: flour	...	78.40	„	(A high yield, colour
„ middlings	...	1.68	„	medium.)
„ pollard	...	9.80	„	
„ bran	...	9.40	„	

99.28 „

Evaporation and loss ... 3.60 „ (See Notes, page 368.)

102.88 „

Gluten, by water test, when

damp 24.6 „

Ditto, ditto, when dry ... 9.3 „

2. *System*.—Crushing between rollers.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as ... 100·0 p. ct.

Impurities removed ... 72 „

99·28 „

Water absorbed to render

mellow ... 3·60 „

102·88 „

Yield: flour ... 74·2 „ (A high yield, colour
„ dark ditto .. 1·2 „ good and with bloom.)

75·4 „

„ middlings ... 7·7 „

„ pollard ... 13·5 „

„ bran .. 5·3 „

101·9 „

Evaporation and loss ... 98 „ (See Notes, page 368.)

102·88 „

Gluten, by water test, when

damp ... 23·4 „

Ditto, ditto, when dry ... 10·5 „

Lot 3.—Indian, average hard white.

Quality—Average hard white. (Colour light yellow, and semi-transparent, with a little hard red; size long and arched; skin thin; wheat clean, but about 3 per cent. of dry hard mud in large pieces; weevil only a trace.)

Value in London, 44s. per 496 lbs.

Weight per bushel, 60 lbs.

Weight of 100 separate grains of the wheat, 68·3 grains avoirdupois.

1. *System*.—Grinding under millstones.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as ... 100·0 p. ct.

Impurities removed ... 3·7 „ (Contained an excess
of dry earth or mud.)

96·3 „

Water absorbed to render

mellow... 8·4 „ (Very high.)

104·7 „

Yield: flour ... 80·52 „

„ middlings ... 7·8 „

„ pollard .. 10·0 „

„ bran ... 8·3 „

99·60 „

Evaporation and loss ... 5·1 „ (See Notes, page 368.)

104·7 „

Gluten, by water test, when
 damp 31'4 p. ct.
 Ditto, ditto, when dry ... 11'7 "

2. *System*.—Crushing between rollers.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as ... 100'0 "

Impurities removed ... 3'7 "

96'3 "

Water absorbed to render
 mellow 8'4 " (Very high.)

104'7 "

Yield : flour 72'1 " (A high yield, colour
 „ dark ditto 1'1 " medium, and good
 bloom.)

73'2 "

„ middlings 10'3 "

„ pollard 14'3 "

„ bran 3'1 "

100'9 "

Evaporation and loss ... 3'8 " (See Notes, page 368.)

104'7 "

Gluten, by water test, when
 damp 33'2 "
 Ditto, ditto, when dry ... 12'6 "

Lot 4.—Indian, average hard red.

Quality—Average hard red. (Colour very dull brown, semi-transparent, with 10 per cent. fine, soft, white, large, coarse grains, arched and pointed.)

Value in London, 43s. per 496 lbs.

Weight per bushel, 61½ lbs. (Condition clean and free from dirt, but a little grain, seed, and linseed and barley ; free from weevil.)

Weight of 100 separate grains of the wheat, 77'7 grains avoirdupois.

1. *System*.—Grinding under millstones.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as ... 100'0 p. ct.

Impurities removed ... 1'2 "

98'8 "

Water absorbed to render
 mellow 7'6 "

106'4 "

Yield : flour...	...	79.88 p. ct.	(An exceedingly high
" middlings ...	...	78	yield ; colour in-
" pollard ...	...	13.20	ferior.)
" bran ...	...	8.50	"
		<u>102.36</u>	
Evaporation and loss ...	...	4.04	(See Notes, page 368.)
		<u>106.4</u>	"

Gluten, by water test, when

damp ...	...	40.4	"
Ditto, ditto, when dry...	...	13.4	"

2. *System*.—Crushing between rollers.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as ...	100.0	"
Impurities removed ...	1.2	"

98.8 "

Water absorbed to render

mellow ...	...	7.6	" (Very high.)
------------	-----	-----	----------------

106.4 "

Yield : flour ...	...	72.3	" (A high yield ; colour
" dark ditto ...	...	1.9	inferior.)

" middlings ...	...	74.2	"
" pollard ...	...	10.3	"
" bran ...	...	13.8	"
		<u>3.0</u>	"

101.3

Evaporation and loss ...	...	5.1	" (See Notes, page 368.)
--------------------------	-----	-----	--------------------------

106.4 "

Gluten, by water test, when

damp ...	...	41.6	"
Ditto, ditto, when dry	...	13.1	"

Lot 5.—English.

Quality—English. (Colour, average red ; skin thick and heavy ; clean, tough from unfavourable season.)

Value in London, 49s. per 496 lbs.

Wheat per bushel, 60½ lbs. (This wheat in dry season would weigh 63 lbs.)

Weight of 100 separate grains of the wheat, 574 grains avoirdupois.

1. *System*.—Grinding under millstones.

Quantity operated upon, 5,000 lbs.

Enter quality treated as ...	100.0 p. ct.
Impurities removed ...	1.5

98.5 "

Water absorbed to render mellow ; none required.				(Already contained some excess of moisture. Would have worked better if mixed with a dry wheat.)
Yield : flour...	...	...	65.2 p. ct.	
„ middlings	...	...	1.1 „	(This low percentage owing to dampness of the wheat, and consequent thickness of skin. Colour good, but not up to average in bloom.)
„ pollard	...	...	9.7 „	
„ bran	...	...	17.7 „	(Exceedingly high from toughness of wheat ; did not clean well.)
			93.7 „	
Evaporation and loss...	...	...	4.8 „	(Evaporation was high from damp condition of wheat. See Notes, page 368.)
			98.5 „	
Gluten, by water test, when damp				
...	...	...	32.8 „	
Ditto, ditto, when dry				
...	...	...	10.6 „	
2. System.—Crushing between rollers.				
Quantity operated upon, 5,000 lbs.				
Enter quantity treated as	...	...	100.0 „	
Impurities removed	...	...	1.5 „	
			98.5 „	
Water absorbed to render mellow, none.				
Yield : flour	...	...	67.8	
„ dark	...	...	2.5	
			70.3 p. ct.	
Middlings	...	...	7.6 „	
Pollard	...	...	7.2 „	
Bran	...	...	9.2 „	(The same remarks apply here as above.)
			94.3 „	
Evaporation and loss	...	...	4.2 „	(See Notes, page 368.)
			91.5 „	
Gluten, by water test, when damp				
...	...	...	34.2 „	
Ditto, ditto, when dry				
...	...	...	11.4 „	

Lot 6.—*Australian.*

Quality—*Australian.* (Skin medium thickness ; short plump grain, with an admixture of about 1 per cent. black oats, straw, and chaff.)

Value in London, 50s. 6d. per 496 lbs.

Weight per bushel, 62½ lbs.

Weight of 100 separate grains of the wheat, 80·5 grains avoirdupois.
(Highest weight of any of the grains of wheat.)

1. *System*.—Grinding under millstones.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as ... 100·0 p. ct.

Impurities removed... 1·0 "

99·0 "

Water absorbed to render
mellow, none

Yield : flour ... 75·8 " (A good yield, superior
" middlings ... 1·1 " white colour and bloom.)

" pollard ... 7·4 "

" bran ... 14·4 "

98·7 "

Evaporation and loss ... 3 " (See Notes, page 368.)

99·0 "

Gluten, by water test, when
damp ... 40·8 "

Ditto, ditto, when dry ... 11·6 "

2. *System*.—Crushing between rollers.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as ... 100·0 "

Impurities removed ... 1·0 "

99·0 "

Water absorbed to render
mellow, none.

Yield : flour ... 73·8 (A high yield, colour,
" dark ... 1·3 and bloom superior.)

75·1 p. ct.

" middlings ... 8·0 "

" pollard ... 9·3 "

" bran ... 5·5 "

97·9 "

Evaporation and loss ... 1·1 " (See Notes, page 368.)

99·0 "

Gluten, by water test, when
damp ... 37·4 "

Ditto, ditto, when dry ... 12·2 "

Lot 7.—New Zealand.

Quality—New Zealand. (Short, plump, and regular white grains,
in very good and clean condition ; skin medium thickness.

Value in London, 48s. per 496 lbs.

Weight per bushel, 62½ lbs.

Weight of 100 separate grains of the wheat, 67·6 grains avoirdupois.

1. *System*.—Grinding under millstones.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as ... 100·0 p. ct.

Impurities removed ... '3 "

99·7 "

Water absorbed to render
mellow ; none required.

Yield : flour ... 76·1 " (A high yield, superior
" middlings ... '96 " white colour.)

" pollard ... 8·8 "

" bran ... 11·5 "

97·36 "

Evaporation ... 2·34 " (See Notes, page 368.)

99·7 "

Gluten, by water test, when

damp ... 31·0 "

Ditto, ditto, when dry ... 10·2 "

2. *System*.—Crushing between rollers.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as .. 100·0 "

Impurities removed ... '3 "

99·7 "

Water absorbed to render
mellow ; none required.

Yield : flour ... 73·9

" dark ... 2·2

76·1 p. ct. (A high yield, superior
" white colour and bloom.)

" middlings ... 7·8 "

" pollard ... 6·6 "

" bran ... 5·6 "

96·1 "

Evaporation and loss ... 3·6 " (See Notes, page 368.)

99·7 "

Gluten, by water test, when

damp ... 26·6 "

Ditto, ditto, when dry ... 9·0 "

Lot 8.—Californian.

Quality—Californian. (White and irregular grains ; skin rather tough ; some barley and oats ; condition good.)

Value in Liverpool, 48s. per 496 lbs.

Weight per bushel, 59½ lbs.

Weight of 100 separate grains of the wheat, 47·7 grains avoirdupois.

1. *System*.—Grinding under millstones:

Quantity operated upon, 5,000 lbs.	
Enter quantity treated as	... 100·0 p. ct.
Impurities removed...	... 1·7 "
	98·3 "

Water absorbed to render
mellow, none.

Yield : flour	... 71·1 "	(Medium yield, colour
" middlings	... 72 "	and bloom exception-
" pollard	... 9·2 "	ally good.)
" bran	... 15·3 "	(A high yield.)

	96·32 "	
Evaporation and loss	... 1·98 "	(See Notes, page 368.)
	98·3 "	

Gluten, by water test, when
damp ...

...	32·2 "
Ditto, ditto, when dry	... 10·5 "

. *System*.—Crushing between rollers.

Quantity operated upon, 5,000 lbs.	
Enter quantity treated as	... 100·0 "
Impurities removed	.. 1·7 "
	98·3 "

Water absorbed to render
mellow, none.

Yield : flour...	... 68·8	(Medium yield, colour
" dark...	... 1·3	and bloom exception-
	70·1 p. ct.	ally good.)
" middlings	... 14·5 "	(A high yield.)
" pollard	... 6·3 "	
" bran	... 3·9 "	

	94·8 "	
Evaporation and loss	... 3·5 "	(See Notes, page 368.)
	98·3 "	

Gluten, by water test, when
damp...

...	29·6 "
Ditto, ditto, when dry	... 8·7 "

Lot 9.—American winter.

Quality—American winter. (Colour red ; grains clean ; skin rather thick, but irregular in size ; condition good.)

Value in London, 49s. 6d. per 496 lbs.

Weight per bushel, 61½ lbs.

Weight of 100 grains of the wheat, 49·6 grains avoirdupois.

1. *System*.—Grinding under millstones.

Quantity operated upon 5,000 lbs.

Enter quantity treated as ... 100·0 p. ct.

Impurities removed ... '5 "

99·5 "

Water absorbed to render
mellow ; none required.

Yield : flour ... 73·8 " (A medium yield,
" middlings... ... '38 " colour fine.)

" pollard ... 7·9 " "

" bran ... 16·4 " (A high yield.)

98·48

Evaporation and loss... ... 1·02 " (See Notes, page 368.)

99·5 "

Gluten, by water test, when

damp 37·0 "

Ditto, ditto, when dry ... 11·0 "

2. *System*.—Crushing between rollers.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as ... 100·0 "

Impurities removed ... '5 "

99·5 "

Water absorbed to render
mellow, none.

Yield : flour ... 70·8 " (A medium yield,
" dark ... '7 " colour and bloom
very fine.)

71·5 "

" middlings ... 10·3 "

" pollard ... 11·2 "

" bran ... 3·1 "

96·1

Evaporation and loss ... 3·4 " (See Notes, page 368.)

99·5 "

Gluten, by water test, when

damp 39·4 "

Ditto, ditto, when dry ... 11·7 "

Lot 10.—American spring.

Quality—American spring. (Small red grains ; skin rather thick ; some oats, with about 2 per cent. cockle and buckwheat.)

Value in London, 48s. per 496 lbs.

Weight per bushel, 61 lbs.

Weight of 100 separate grains of the wheat, 35.5 grain avoirdupois.

1. *System*.—Grinding under millstones.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as ... 100.0 p. ct.

Impurities removed ... '9 "

99.1 "

Water absorbed to render
mellow ; none required.

Yield : flour	...	72.2	"	(Medium yield, colour
" middlings ...	...	24	"	and bloom exception-
" pollard ...	...	7.2	"	ally good.)
" bran ...	...	14.7	"	

94.34

Evaporation and loss ... 4.76 " (See Notes, page 368.)

99.1 "

Gluten, by water test, when

damp ... 40.6 "

Ditto, ditto, when dry ... 15.3 " (Strength above average.)

2. *System*.—Crushing between rollers.

Quantity operated upon 5,000 lbs.

Enter quantity treated as ... 100.0 "

Impurities removed... '9 "

99.1 "

Water absorbed to render
mellow ; none required.

Yield : flour ...	...	68.7	"
" dark ...	...	8	"

69.5

" mindlgs ... 12.1 " (Medium yield, colour

" pollard ... 10.4 " and bloom exception-

" bran ... 3.8 " ally good.)

95.8

Evaporation and loss ... 3.3 " (See Notes, page 368.)

99.1 "

Gluten, by water test, when

damp ... 39.2 "

Ditto, ditto, when dry ... 14.6 " (Strength above average.)

Lot 11.—Russian, Saxonska.

Quality—Saxonska. (Long, red, transparent grain ; skin medium thickness ; some cockle and oats ; few of the smallest grains unsound, otherwise good condition to work.)

Weight per bushel, 60½ lbs.

Value in London, 52s. per 496 lbs.

Weight of 100 separate grains of the wheat, 37.3 grains
avoirdupois.

1. *System*.—Grinding under millstones.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as ... 100.0 p. ct.

Impurities removed ... '9 "

99.1 "

Water absorbed to render
mellow ; none required.

Yield : flour	...	...	73.0 p. ct.	(Medium yield, colour
" middlings	...	...	1.2 "	good, strength un-
" pollard	...	...	11.6 "	equalled.)
" bran	...	...	12.6 "	(High yields.)

98.4 "

Evaporation and loss ... '7 " (See Notes, page 368.)

99.1 "

Gluten, by water test, when
damp ...

64.2 "

Ditto, ditto, when dry ... 22.1 " (Exceptionally high.)

2. *System*.—Crushing between rollers.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as ... 100.0 "

Impurities removed ... '9 "

99.1 "

Water absorbed to render
mellow ; none required.

Yield : flour	...	...	70.5 "	(High yield, colour
" dark ditto	...	...	'9 "	good, strength quite
			71.4 "	unequalled.)
" middlings	...	...	12.5 "	
" pollard	...	...	11.7 "	
" bran	...	...	3.3 "	

98.9 "

Evaporation and loss ... '2 " (See Notes, page 368.)

99.1 "

Gluten, by water test, when

damp ... 71.0 "

Ditto, ditto, when dry ... 23.2 " (Exceptionally high.)

Lot 12.—Russian, Taganrog.

Quality—Hard Taganrog. (Colour yellow; size, large long transparent grains; about 3 per cent. barley and small pieces dry mud; too hard for grinding, required damping; skin thin.)

Value in London, 49s. per 496 lbs.

Weight per bushel, 61½ lbs.

Weight of 100 separate grains of the wheat, 54·7 grains avoirdupois.

1. *System.*—Grinding under millstones.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as ... 100·0 p. ct.

Impurities removed ... '8 "

99·2 "

Water absorbed to render

mellow ... 2·4 "

101·6 "

Yield: flour ... 76·2 " (Good yield; much yellow bloom; very

" middlings ... 1·2 " strong.)

" pollard ... 12·7 " }

" bran ... 8·1 " (Medium yield.)

98·2 "

Evaporation and loss ... 3·4 " (See Notes, page 368.)

101·6 "

Gluten, by water test, when

damp ... 51·1 " }

Ditto, ditto, when dry ... 17·6 " (Very high.)

2. *System.*—Crushing between rollers.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as ... 100·0 "

Impurities removed ... '8 "

99·2 "

Water absorbed to render

mellow ... 2·4 "

101·6 "

Yield: flour ... 70·7 " (Yield not as high as

" dark ditto ... 1·3 " expected; colour with

72·0 "

" middlings ... 9·6 "

" pollard ... 12·1 " }

" bran ... 5·0 " (Higher than expected.)

98·7 "

Evaporation and loss ... 2·9 " (See Notes, page 368.)

101·6 "

Gluten, by water test, when				
damp ...	...	...	47.0 p. ct.	} (Very high.)
Ditto, ditto, when dry	...	...	15.6 "	

Lot 13.—Egyptian, Buhi.

Quality—Buhi. (Large white and red grains ; thick skin ; contained 10 per cent. barley, and dry mud freely ; required washing ; only one degree better than the Saida wheat. (See No. 14.)

Value in Liverpool, 47s. per 496 lbs.

Weight per bushel, 58lbs.

Weight of 100 separate grains of the wheat, 50.1 grains avoirdupois.

1. *System.*—Grinding under millstones.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as ... 100.0 p. ct.

Impurities removed ... 2.7 "

97.3 "

Water absorbed to render
mellow ... 3.1 "

100.4 "

Yield : flour	...	...	72.9	"	(Medium yield, colour poor and murky, no strength, very inferior.)
" middlings	...	...	1.0	"	

" pollard	...	...	11.0	"	} (Yield low.)
" bran	...	...	10.0	"	

94.9 "

Evaporation and loss ... 5.5 " (See Notes, page 368.)

100.4 "

Gluten, by water test, when

damp ... 11.5 "

Ditto, ditto, when dry ... 4.4 "

2. *System.*—Crushing between rollers.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as ... 100.0 "

Impurities removed ... 2.7 "

97.3 "

Water absorbed to render
mellow... 3.1 "

100.4 "

Yield: flour	...	...	70.8 p. ct.	(Medium yield, colour
„ dark ditto	...	...	1.8	poor, no strength,
				very inferior.)
			72.6	„
„ middlings	...	...	10.4	„
„ pollard	...	...	8.5	„
„ bran	...	...	3.5	„ } (Yield small.)
			95.0	„
Evaporation and loss	...	...	5.4	(See Notes, page 368.)
			100.4	„

Gluten, by water test, when				
damp	...	...	20.2	„
Ditto, ditto, when dry	...	...	7.9	„

Lot 14.—Egyptian, Saida.

Quality—Saida. (Deservedly ranks as the poorest wheat in the market; medium, hart white grain, with a few darker; skin thick; some rape seed, and large quantity of small pieces of mud; required much washing before use.)

Value in Liverpool, 43s. 6d. per 496 lbs.

Weight per bushel, 57½ lbs.

Weight of 100 separate grains of the wheat, 61.4 grains avoirdupois.

1. *System.*—Grinding under millstones.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as ... 100.0 p. ct.

Impurities removed ... 12.1 „

87.9 „

Water absorbed to render
mellow ... 2.7 „

90.6 „

Yield: flour	...	...	66.9	„	(Yield exceptionally
„ middlings	...	...	0.76	„	low, colour poor and
					murky; has no
					strength.)
„ pollard	...	...	11.4	„	
„ bran	...	...	7.5	„	(Yield low.)

			86.56	„	
Evaporation and loss	...	...	4.04	„	(See Notes, page 368.)
			90.6	„	

Gluten, by water test, when				
damp	...	...	22.7	„
Ditto, ditto, when dry	...	...	7.5	„

2. *System.*—Crushing between rollers.

Quantity operated upon, 5,000 lbs.

Enter quantity treated as ... 100·0 p. ct.

Impurities removed ... 12·1 "

87·9 "Water absorbed to render
mellow ... 2·7 "

90·6 "

Yield: flour ... 66·0 "

" dark ditto ... 1·8 "

(Yield exceptionally
low, colour poor and
murky; has no
strength.)

67·8 "

" middlings ... 7·2 "

" pollard ... 6·5 "

" bran ... 4·9 "

(Yield low.)

86·4 "

Evaporation and loss ... 4·2 "

(See Notes, page 368.)

90·6 "Gluten, by water test, when
damp ... 17·1 "

Ditto, ditto, when dry ... 6·6 "

Synopsis and Comparison of Results obtained from Indian and other Wheats, by two Systems of Milling, by McDougall Brothers, at their Wheatsheaf Mills, London.

No.	Wheat.	Value in London per 496 lbs. net weight on day of valuation.	Weight per Bushel.	Weight of 100 separate grains of the Wheat.	Quantity used.	Impurities removed.	Water absorbed to render mellow.	Yield.				Evaporation and Loss.	Gluten, by Water Test.
								Flour.	Mid-lings.	Pollard.	Bran.		
		s. d.	Lbs.	Grs. avdwt.	Lbs.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
1	* Indian (fine soft white)	49 0	61	55½	5,000	132	20	77½	82	88	120	64	64
2	" (superior soft red)	49 0	61	55½	5,000	132	20	77½	82	88	120	68	68
3	" (average hard "white")	45 0	62½	51½	5,000	72	36	75½	168	98	94	36	93
4	" (average hard red)	44 0	60	68½	5,000	72	36	80½	78	100	83	51	105
5	* English	43 0	61½	77½	5,000	37	84	73½	103	143	31	38	117
6	* Australian	49 0	60½	57½	5,000	12	76	79½	78	1320	850	404	134
7	* New Zealand	50 6	62½	80½	5,000	12	76	73½	103	138	30	51	131
8	* Californian	48 0	62½	67½	5,000	12	76	71½	78	138	30	51	131
9	* American (winter)	49 6	61½	49½	5,000	17	71	70½	72	92	153	198	105
10	" (spring)	48 0	61	35½	5,000	17	71	70½	145	63	39	35	87
11	* Russian (Saxonska)	52 0	60½	37½	5,000	5	738	738	38	79	164	102	110
12	" (hard Teganrog)	52 0	60½	37½	5,000	5	738	738	38	79	164	102	110
13	* Egyptian (Buh)	47 0	63	50½	5,000	9	732	715	103	112	31	34	117
14	" (Saïda)	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
15	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
16	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
17	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
18	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
19	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
20	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
21	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
22	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
23	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
24	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
25	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
26	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
27	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
28	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
29	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
30	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
31	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
32	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
33	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
34	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
35	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
36	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
37	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
38	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
39	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
40	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
41	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
42	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
43	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
44	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
45	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
46	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
47	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
48	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
49	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
50	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
51	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
52	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
53	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
54	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
55	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
56	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
57	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
58	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
59	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
60	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
61	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
62	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
63	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
64	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
65	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
66	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
67	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
68	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
69	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
70	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
71	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
72	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
73	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
74	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
75	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
76	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
77	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
78	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
79	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
80	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
81	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
82	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
83	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
84	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
85	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
86	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
87	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
88	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
89	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
90	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
91	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
92	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
93	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
94	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
95	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
96	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
97	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
98	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
99	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153
100	"	43 6	57½	61½	5,000	9	732	715	24	72	147	476	153

† Crushing between rollers.

* Grinding under millstones.

When the manufacture of the wheats into flour was completed, we proceeded to convert into bread a given quantity of each flour from the Indian wheats by both systems of milling, and from the remaining wheats by the roller system, and the results obtained are stated in the following tables, with a tabular synopsis for convenience of ready comparison :—

BREAD.

*No. 1.—From Indian fine soft white Wheat.*1. *System.*—Grinding under millstones.

Flour used ...	...	280 lbs.
French yeast ...	...	1 "
Liquid Potato ferment ...	...	30 "
Salt ...	...	3½ "
Water used ...	...	141'4 "
Yield of bread when cold ...	...	364 " (High.)

Percentage of bread to flour ...	130'0	(Ditto.)
" water to flour ...	50'5	(Ditto.)

Taking 10 as standard of fair average London bread,—

Colour, exterior ...	...	10
Colour, interior ...	...	17
Flavour... ..	...	7
Texture... ..	...	8 (Rather dense.)
General characteristics ...	...	11 (Loaf small.)

2. *System.*—Crushing between rollers.

Flour used ...	...	280 lbs.
French yeast ...	...	1 "
Liquid potato ferment ...	...	30 "
Salt ...	...	3½ "
Water used ...	...	149'6 " (Very high.)
Yield of bread when cold ...	...	367'5 " (Ditto.)

Percentage of bread to flour ...	131'2	(Ditto.)
" water to flour ...	53'4	(Ditto.)

Taking 10 as standard of fair average London bread,—

Colour, exterior ...	...	13
Colour, interior ...	...	13
Flavour ...	...	9
Texture ...	...	9 (Rather dense.)
General characteristic ..	12	(Loaf small.)

*No. 2.—From Indian superior soft red Wheat.*1. *System.*—Grinding under millstones.

Flour used ...	...	280 lbs.
French yeast ...	...	1 "
Liquid potato ferment ...	...	30 "
Salt ...	...	3½ "
Water ...	...	141'6 " (High.)
Yield of bread when cold ...	...	372 " (Very high.)

Percentage of bread to flour	... 133.0	(Very high.)
„ water to flour	... 50.6	(High.)

Taking 10 as standard of fair average London bread,—

Colour, exterior	... 8	
Colour, interior	... 10	
Flavour	... 7	
Texture	... 9	(Rather dense.)
General characteristics	... 10	(Loaf small.)

System.—Crushing between rollers.

Flour used	... 280 lbs.	
French yeast	... 1 „	
Liquid potato ferment	... 30 „	
Salt	... 3½ „	
Water	... 148 „	(Very high.)
Yield of bread when cold	... 362 „	(High.)

Percentage of water to flour	... 52.8	(Very high.)
„ bread to flour	... 129.3	(High.)

Taking 10 as standard of fair average London bread,—

Colour, exterior	... 12	
Colour, interior	... 13	
Flavour	... 9	
Texture	... 10	(Rather dense.)
General characteristics	... 11	(Loaf small.)

No. 3.—From Indian average hard white Wheat.

1. *System.*—Grinding under millstones.

Flour used	... 280 lbs.	
French yeast	... 1 „	
Liquid potato ferment	... 30 „	
Salt	... 3½ „	
Water	... 141.0 „	(High.)
Yield of bread when cold	... 370.5 „	(Very high.)

Percentage of bread to flour	... 132.4	(High.)
Percentage of water to flour	... 50.3	(Ditto.)

Taking 10 as standard of fair average London bread,—

Colour, exterior	... 6	
Colour, interior	... 7	
Flavour	... 7	
Texture	... 10	(More elastic than Nos. 1 and 2.)
General characteristics	... 7	(Loaf small.)

2. *System.*—Crushing between rollers.

Flour used	... 280 lbs.	
French yeast	... 1 „	
Liquid potato ferment	... 30 „	
Salt	... 3½ „	
Water	... 149.6 „	(Very high.)
Yield of bread when cold	... 365 „	(High.)

Percentage of bread to flour ...	130·3	(High.)
Percentage of water to flour ...	53·4	(Very high.)

Taking 10 as standard of fair average London bread,—

Colour, exterior ...	...	10	
Colour, interior ...	...	9	
Flavour ...	...	9	
Texture ...	...	10	(More elastic than Nos. 1 and 2.)
General characteristics ...	...	9	(Loaf small.)

No. 4.—From Indian average hard red Wheat.

1. *System.*—Grinding under millstones.

Flour used ...	...	280	lbs.
French yeast ...	...	1	"
Liquid potato ferment ...	...	30	"
Salt ...	...	3½	"
Water used ...	...	145·2	" (High.)
Yield of bread when cold ...	...	376·6	" (Exceptionally high.)

Percentage of bread to flour ...	134·5	(Ditto.)
Percentage of water to flour ...	51·8	(High.)

Taking 10 as standard of fair average London bread,—

Colour, exterior ...	...	5	
Colour, interior ...	...	7	
Flavour ...	...	7	
Texture ...	...	10	(More elastic than Nos. 1 and 2.)
General characteristics ...	...	6	

2. *System.*—Crushing between rollers.

Flour used ...	...	280	lbs.
French yeast ...	...	1	"
Liquid potato ferment ...	...	30	"
Salt ...	...	3½	"
Water ...	...	147·4	" (Very high.)
Yield of bread when cold ...	...	365·0	" (High.)

Percentage of bread to flour ...	130·3	(Ditto.)
Percentage of water to flour ...	52·2	(Very High.)

Taking 10 as standard of fair average London bread,—

Colour, exterior ...	...	9	
Colour, interior ...	...	9	
Flavour ...	...	8	
Texture ...	...	10	(More elastic than Nos. 1 and 2.)
General characteristics ...	...	8	(Loaf small.)

*No. 5.—From English Wheat.**System.*—Crushing between rollers.

Flour used...	...	280	lbs.	
French yeast	...	1	"	
Liquid potato ferment	...	30	"	
Salt	...	3½	"	
Water	...	130·0	"	(Rather low.)
Yield of bread when cold	...	352·0	"	(Ditto.)
Percentage of bread to flour	...	125·7		(Ditto.)
Percentage of water to flour	...	46·4		(Ditto.)

Taking 10 as standard of fair average London bread,—

Colour, exterior	...	13	(Good.)
Colour, interior	...	12	(Ditto.)
Flavour	...	13	(Very good.)
Texture	...	10	(Silky and good.)
General characteristics	...	10	(Loaf medium. Bloom not equal to best English after good harvest.)

*No. 6.—From Australian Wheat.**System.*—Crushing between rollers.

Flour used ...	...	280	lbs.	
French yeast	...	1	"	
Liquid potato ferment	...	30	"	
Salt	...	3½	"	
Water	...	134·2	"	
Yield of bread when cold	...	355·4	"	
Percentage of bread to flour	...	126·9		(Medium.)
Percentage of water to flour	...	48·0		(Ditto.)

Taking 10 as standard of fair average London bread,—

Colour, exterior	...	12	
Colour, interior	...	12	
Flavour	...	12	
Texture	...	10	(Good.)
General characteristics	...	11	(Medium in size.)

*No. 7.—From New Zealand Wheat.**System.*—Crushing between rollers.

Flour used ...	...	280	lbs.	
French yeast	...	1	"	
Liquid potato ferment	...	30	"	
Salt	...	3½	"	
Water	...	132·0	"	
Yield of bread when cold	...	349·0	"	

Percentage of bread to flour	...	124·6	"
Percentage of water to flour	...	47·1	"

Taking 10 as standard of fair average London bread,—				
Colour, exterior	...	...	12	(Very good.)
Colour, interior	...	...	12	(Ditto.)
Flavour	...	...	12	(Ditto.)
Texture	...	...	9	(Rather weak.)
General characteristics	...	...	10	(Loaf medium in size.)

No. 8.—From Californian Wheat.

System.—Crushing between rollers.

Flour used	...	...	280	lbs.
French yeast	...	...	1	"
Liquid potato ferment	...	...	30	"
Salt	...	...	3½	"
Water	...	...	136·8	"
Yield of bread when cold	...	...	364·0	"
Percentage of bread to flour	...	...	130·0	
Percentage of water to flour	...	...	48·9	

Taking 10 as standard of fair average London bread,—

Colour, exterior	...	...	12	(Very good.)
Colour, interior	...	...	12	(Ditto.)
Flavour	...	...	12	(Ditto.)
Texture	...	...	9	(Rather weak.)
General characteristics	...	...	10	(Loaf medium in size.)

No. 9.—From American winter Wheat.

System.—Crushing between rollers.

Flour used	...	...	280	lbs.
French yeast	...	...	1	"
Liquid potato ferment	...	...	30	"
Salt	...	...	3½	"
Water	...	...	130	"
Yield of bread when cold	...	...	346	"
Percentage of bread to flour	...	...	123·5	
Percentage of water to flour	...	...	46·4	

Taking 10 as standard of fair average London bread,—

Colour, exterior	...	...	13	(Very good.)
Colour, interior	...	...	12	(Ditto.)
Flavour	...	...	12	(Ditto.)
Texture	...	...	10	(Good.)
General characteristics	...	...	11	(Loaf medium in size.)

No. 10.—From American spring Wheat.

System.—Crushing between rollers.

Flour used	...	...	280	lbs.
French yeast	...	...	1	"
Liquid potato ferment	...	...	30	"
Salt	...	...	3½	"
Water	...	...	130	"
Yield of bread when cold	...	...	354	" (Good average.)

Percentage of bread to flour	...	126.4
Percentage of water to flour	...	46.4

Taking 10 as standard of fair
average London bread,—

Colour, exterior	...	8	(Too red.)
Colour, interior	...	10	
Flavour	...	10	
Texture	...	12	(Very good, elastic.)
General characteristics	...	9	(Loaf lofty.)

No. 11 — From Russian Sarnouska Wheat.

System.—Crushing between rollers.

Flour used	...	280	lbs.
French yeast	...	1	"
Liquid potato ferment	...	30	"
Salt	...	3½	"
Water	...	130	"
Yield of bread when cold	...	356	" (Good average.)

Percentage of bread to flour	...	127.1
Percentage of water to flour	...	46.4

Taking 10 as standard of fair
average London bread,—

Colour, exterior	...	8	(Too red.)
Colour, interior	...	9	
Flavour	...	9	
Texture	...	13	(Very good, elastic.)
General characteristics	...	9	(Loaf very lofty.)

No. 12.—From Russian hard Taganrog Wheat.

System.—Crushing between rollers.

Flour used	...	280	lbs.
French yeast	...	1	"
Liquid potato ferment	...	30	"
Salt	...	3½	"
Water	...	145.4	"
Yield of bread when cold	...	354.5	"

Percentage of bread to flour	...	126.6
Percentage of water to flour	...	51.6

Taking 10 as standard of fair
average London bread,—

Colour, exterior	...	10	(With fine bloom.)
Colour, interior	...	11	(Ditto.)
Flavour	...	9	
Texture	...	12	(Very good, elastic.)
General characteristics	...	9	(Fair loaf, but smaller than expected.)

11 No. 13.—*From Egyptian (Buhi) Wheat.*

System.—Crushing between rollers.

Flour used ...	...	280	lbs.
French yeast ..	..	1	"
Liquid potato ferment	...	30	"
Salt ...	...	3½	"
Water ...	...	136·8	"
Yield of bread when cold	...	362·0	"

Percentage of bread to flour ... 129·3

Percentage of water to flour ... 48·9

Taking 10 as standard of fair
average London bread,—

Colour, exterior ...	...	7	(Very inferior.)
Colour, interior ...	...	6	(Ditto.)
Flavour ...	...	6	(Ditto.)
Texture ...	...	7	(Ditto.)
General characteristics	...	5	(Loaf very small and heavy, possessed no good points.)

No. 14.—*From Egyptian (Saida) Wheat.*

System.—Crushing between rollers.

Flour used...	...	280	lbs.
French yeast ...	...	1	"
Liquid potato ferment	...	30	"
Salt ...	...	3½	"
Water ...	...	144·4	"
Yield of bread when cold	...	358·0	"

Percentage of bread to flour ... 127·7

Percentage of water to flour ... 51·6

Taking 10 as standard of fair
average London bread,—

Colour, exterior ..	...	6	(Very inferior.)
Colour, interior ...	...	4	(Ditto.)
Flavour ...	...	4	(Ditto.)
Texture ...	...	6	(Ditto.)
General characteristics	...	4	(Loaf small and heavy, and a degree worse than from the Buhi wheat, Lot 13.)

SYNOPSIS.

THE FLOURS AND BREADS.—Results obtained in converting the Flours into Bread.
Note.—Of Lots 1, 2, 3, 4, Indian Wheats, the stone flours and roller flours were made into Bread. Of Nos. 5 to 14 inclusive the roller flours only were made into Bread.

No.	Wheat.	Quantities used.					Yield of Bread, when cold.		Percentages.		Colour, Taste, and Texture, (Taking 10 as the standard of fair average quality of London Households Bread made from London Flour, Households and Whites in equal proportions.)					Remarks.
		Flour.	French Yeast.	Liquid Potash.	Salt.	Water.			Per-centage of Bread to Flour.	Per-centage of Water to Flour.	Colour, g.	Colour, in texture.	Flavour.	Texture.	General Character.	
1	Indian (fine soft white)	280	1	30	34	141.4	lbs.	361.0	130.0	50.5	10	11	7	8	11	Loaf small and rather dense.
2	" (superior soft white)	280	1	30	34	149.6	367.5	131.2	131.2	53.4	13	13	9	9	12	Ditto.
3	" (average hard white)	280	1	30	34	148.0	362.0	129.3	133.0	50.6	8	10	9	10	11	Ditto.
4	" (average hard red)	280	1	30	34	141.0	370.5	132.4	129.3	50.8	6	7	7	10	7	Ditto; texture more elastic.
5	" (average hard red)	280	1	30	34	149.6	365.0	130.3	133.4	51.8	10	9	9	10	9	Ditto; to ricey.
6	" English	280	1	30	34	145.2	376.6	134.5	130.3	52.2	9	9	8	10	8	Ditto, ditto. Bloom not equal to best English after good harvest. Flour very good. Fine silky texture.
7	Australian	280	1	30	34	139.0	352.0	125.7	125.7	46.4	13	12	13	10	10	Loaf medium size. Texture good; silky.
8	New Zealand	280	1	30	34	134.2	355.4	125.9	125.9	48.0	12	12	12	10	11	Loaf medium size. Texture little weak. Dough of putty nature.
9	California	280	1	30	34	132.0	349.0	124.6	124.6	47.1	12	12	12	9	10	Loaf medium in size. Texture a little weak. Crust too pale.
10	American (winter)	280	1	30	34	130.0	346.0	123.5	123.5	46.4	13	12	12	10	11	Loaf medium in size. Texture good.
11	" (spring)	280	1	30	34	130.0	354.0	123.4	123.4	46.4	8	10	10	12	9	Loaf lofty. Elastic texture. Handles kindly.
12	Russian Saxonska	280	1	30	34	130.0	356.0	127.1	127.1	46.4	8	9	9	13	9	Loaf very lofty. Very elastic texture; so strong operatives complained required to much strength in handling it.
13	" (hard Taganrog)	280	1	30	34	145.4	354.5	120.6	120.6	51.9	10	11	9	12	9	Loaf lofty. Fine bloom. Texture good. Red crust.
14	Egyptian (Bahi)	280	1	30	34	136.8	362.0	123.3	123.3	48.9	7	6	6	7	5	Loaf possessed no good points.
15	" (Saida)	280	1	30	34	144.4	358.0	127.7	127.7	51.6	6	4	4	6	4	Ditto; a degree lower than above.

* Grinding under millstones.

+ Crushing between rollers.

NOTES.

The Evaporation and Loss in milling.—The percentages under this heading, it will be noticed, vary considerably from—

No. 11, Russian Saxonska, stones	...	...	0·7
rollers	...	...	0·2
No. 13, Egyptian—Buhi, stones	...	...	5·5
rollers	...	...	5·4

These variations must not be attributed chiefly to the differences in qualities of the wheats, as they arise mainly from the waste and loss that is inseparable from working small quantities on a practical scale; about ten quarters of each wheat was operated upon in these experimental workings, whereas in ordinary milling a “grist” will run from one thousand to several thousand quarters. This will be readily understood, when it is borne in mind that, after the working of each separate wheat by either process, the stones or rollers, hoppers, elevators, dressing silks, &c., have to be swept out, and it is impossible to avoid some waste from this cause. In milling operations it is found there is a larger loss, &c., “unaccounted for” on inferior wheats than upon good wheats, but it does not exceed a total of 1 to 2 per cent. For practical purposes, the items Evaporation and Loss should be taken as obtained by competent millers, viz. :—

From stones	...	...	1 to 2 per cent.
From rollers	...	...	1 to 3 per cent.

according to the qualities of the wheats.

Water used in Bread making.—The differences in the quantities of water required by each of the flours from Indian wheats per 280 lbs. flours in making them into bread (ranging from 149·6 lbs. to 141·0 lbs. water) is partly accounted for by the fact of somewhat similar variations in the water absorbed in rendering the wheats mellow for milling.

Weight per bushel of Wheats.—These experimental workings have brought to light a fact well worth noting, viz., that the rule so generally held amongst wheat sellers and buyers, and thought to be without an exception, that the greater the weight of a bushel of wheat so much higher must it rank as a flour yielder, and consequently in value, must now be regarded as true only within a strict limit. A high standard of weight for any given cubical measurement is, no doubt, a good criterion as to dryness of condition, and soundness of the grain, for any dampness in grain causes it to weigh *lighter* per bushel or quarter of measurement instead of heavier (a fact which will surprise the uninitiated). But experienced parties will study with interest the three columns in the synopsis of the wheats showing “weight of 100 separate grains” of each wheat, “weight per bushel,” and “yield of flour.” Taking equal weights of the four Indian wheats, it will be found that No. 3, weighing 60 lbs. per bushel, yielded more flour than No. 1, weighing 64 lbs.; also, that No. 4, weighing 60 lbs. per bushel, yielded more flour than No. 2, weighing 62½ lbs. The reason of this is evident. The four wheats were equally and perfectly dry, and probably would have weighed the same per bushel had the size and shape of the grains of each wheat been the same, but they differ widely in this respect, Nos. 1 and 2 being

medium or small, and Nos. 3 and 4 long and arched. Hence the latter will not fill into a measure as closely as the former, leaving larger spaces unoccupied, and causing any given measure to weigh less in consequence. The old rule holds good for wheats the grains of which in size and shape are similar, but it will only mislead if applied to Indian wheats like Nos. 3 and 4. It was, doubtless, adopted at a period when it was the custom for all wheats to be sold by measure, and for sales by measure it is still a correct guide, but as sales are now made by weight rather than by measure, the rule can only safely be applied within the limits indicated.

After a careful examination of the wheats, of the flours and offals, of the bread obtained from the flours, and the records of the workings of each process, we have further to report :—

The four lots of Indian wheats were delivered to us, packed in the ordinary gunny bags, and all in good condition. None of them were sea damaged, nor had they suffered in any way from storage in the ship.

We examined the wheats, and found them to be good representative samples of—

- No. I. Indian fine soft white,
- No. II. Indian superior soft red,
- No. III. Indian average hard white,
- No. IV. Indian average hard red,

but were, with the exception of No. 3, much cleaner and freer from impurities than these wheats generally are.

The leading characteristics of these wheats, details of which are in the tabulated statement, are as follows :—

The fine soft white (Lot 1).—Grains white, medium sized, and regular; fairly mellow; skin thin; handled exceedingly well; weight per bushel, 64 lbs., which is only equalled by specially fine samples of any wheat. Clean and free from seeds; contained 2 per cent. of weevilled grains.

Results of the milling and bakings prove it is an exceedingly good and useful wheat; the flour being great in quantity, of pure white colour and superior bloom, and with a slight beany flavour. It is more suitable for markets requiring *white* flours rather than strength, owing to its containing an exceptionally low percentage of gluten. The yield of bread from it is very large.

Superior soft red (Lot 2).—Grains dull light-brown, with about 5 per cent. white wheat. In size, half medium and half small; semi-hard; skin thin; handled very well; weight per bushel, 62½ lbs., which is only reached by fine wheats. Clean and free from seeds; contained only a trace of weevil.

Results of the milling and bakings prove it is a good and useful wheat; the flour being great in quantity and of medium colour and strength, with a slight beany flavour, and containing an average of gluten. Suitable for markets requiring flours of medium strength and colour. The yield of bread is exceptionally large.

Average hard white (Lot 3).—Grains light yellow and semi-transparent, with a little hard red; skin thin; in shape long and

arched. The wheat itself was clean, but intermixed there was about 3 per cent. hard dry bits of mud (which spoiled the handling), otherwise free from admixture. Weight, 60 lbs. per bushel. Weevils only a trace.

Results of the milling and bakings prove it is a useful wheat for markets requiring strength; flavour, beany; the gluten (by water test) averaging 12 per cent. This wheat (and No. 4) are probably unsurpassed by any other wheats in the world as regards the quantity of flour yielded. In colour, medium. Specially useful for mixing with very damp English wheats to bring them into condition for milling. It is also a profitable wheat for millers, owing to its requiring 8.4 per cent. water to render it sufficiently mellow for use.

To this wheat, and to the Indian average hard red (Lot 4), must be awarded the distinction of *producing more bread than any other flour*, making it a "baker's" flour as well as a "miller's." The yield of bread is exceptionally large.

Average hard red (Lot 4).—Grains very large and coarse, long, arched and pointed; in colour dull brown, and semi-transparent, with an admixture of 10 per cent. fine soft white; skin thin; handles well; contains a little gram, seed, linseed, and barley. Weight, 61½ lbs. per bushel. Weevils only a trace.

Results of the milling and bakings prove it produces a common and dry strong flour, in almost unequalled quantity. In colour, inferior. A profitable wheat for millers, as it takes 7.6 per cent. water to render it sufficiently mellow for use. The yield of bread is exceptionally large, making it a "baker's" flour as well as a "miller's." (See remarks on Lot 3.)

For characteristics and particulars of the other wheats and flours obtained from them, we beg to refer back to the tabulated statements, and need here only further remark respecting them.

No. 5, English.—The yield was poor, undoubtedly owing to these wheats this season being in poor condition, and colour of flour not equal to that from this wheat when in prime condition.

No. 6, Australian, and No. 7, New Zealand.—High yields. Colour and bloom of flours superior, and other characteristics very similar, except that Australian is decidedly stronger.

No. 8, Californian.—These wheats would be improved if the small quantity of barley and oats they so frequently contain could be kept out, which cannot be entirely removed by any separating machines, as they slightly depreciate the flour. Whilst below Australian and New Zealand in yield and strength (the former arising from its somewhat thicker skin), perhaps in the special points of colour and bloom this flour, and that from American red winters (No. 9), are unequalled.

No. 9, American red winter.—The same remarks as on Lot 8 as to yield and quality of the flour.

No. 10, American spring.—Medium yield, arising from thickness of the sink, and the cockle and the buckwheat present. The flour is of good colour and superior strength.

No. 11, Russian, Saxonska.—Medium yield of flour, good in colour,

and in strength quite unequalled. An invaluable wheat for mixing with weaker ones to add strength to the flour. Of gluten it contains (by the water test) 22·1 per cent. (dry), or double of that contained in the English lot.

No. 12, *Russian, Taganrog*.—Good yield, colour of flour good, with much yellow bloom, and for strength ranks next to Saxonska (No. 11).

No. 13, *Egyptian, Buhi*.—Ranks only one degree above Saida (Lot. 14).

No. 14, *Egyptian, Saida*.—Deservedly ranks as the poorest wheat in the market; possesses no good qualities, and is not nearly worth its price.

The two Systems of Milling.

That of *grinding under millstones* has been in operation from time immemorial, and with but slight improvements, those of recent years relating chiefly to the dress or separation of the offals from the flour by the employment of cylinders lined with silk, instead of wire, within the dressing machines. This system produces flour of one "run" or quality, and does not offer facilities for the production of flours of high, medium, and low grades from the same wheat. Unless care is taken in the grinding to keep the stones sufficiently high, the flour is apt to be "dead" or "killed," that is, to lack anything approaching to granular character, owing to the stones having been employed too close together. On the other hand, if the stones are worked too "high," a loss results from all of the flour not being removed from the bran. It is inseparable from this grinding system that some of the outer skin or bran is also torn or ground into flour, so preventing the attainment of perfection of colour. It is well adapted, however, for the production of common ordinary flours, for, as will be readily seen, it must produce a *greater quantity* of flour than a system which more thoroughly separates the offals.

By the *roller system* flour is produced by flattening or squeezing the grain through a series of rollers, as distinguished from the tearing or grinding of millstones. The wheat is first cracked through a first set of rolls and its sieve, so separating a small quantity of flour and dirt, the latter being liberated out of the crease of the wheat, and is not removeable by any system of brushing or blowing. It is important to get rid of this impurity at the initial step of the process, as it then does not get incorporated with the subsequent flours. The cracked and purified wheat is then passed on through other sets of rolls and sieves, and rendered into middlings and flour. From these middlings the higher grades of flour are made; they are first freed from all light particles of the skin by being passed through "purifiers," and then through several successive sets of rolls and silks, each set yielding flour of a different grade. Each grade may be kept separate, or caused to run together into a mixing worm and so become one run of flour. (The wheats operated upon by this system in these experimental workings were so rendered into flour of one run or quality.) A leading feature in this system is that the germ of the wheat, in which lies the chief portion of the colouring matter of the grain, is not torn or ground into flour as it is by the system of grinding under stones, but the action of the rollers is to squeeze or flatten it, and, from its soft and oleaginous nature, to increase its size, so rendering

its separation from the flour easy. The outer skin or bran is also freed from its adhering flour by the same pressure. But inasmuch as hardly any of the bran is crushed into flour, the yield of offals must be larger than from the grinding system. The advantages of the system are, less liability to "kill" or destroy the granular nature of the flour, the removal of the dirt found in the creases of the wheat, and the separation of the germ, so rendering the attainment possible of a high standard in the character, colour, and bloom of the flour. It is attended with a slightly increased yield of offals, which of course means the quantity of wheat required to produce a sack of flour must be proportionately increased; as a rough average, say 400 lbs. wheat for rollers against 380 lbs. for stones. Offals of very similar quality are produced by both systems, viz., coarse middlings, pollard, and bran, except that the bran from the rollers is smaller than from stones, and is consequently slightly lowered in value, say about 10s. per ton. The percentages of offals yielded by each system are given in the tabulated returns.

In these experimental workings the meshes of the silks through which the flour was dressed were as follows:—

In the grinding process...	...Silks No. 12.
„ roller „ ...	... „ „ 13 (or one shade finer).

The Offals.—This is a subject of minor importance as compared with the yields and qualities of flour and bread, and it is only needful to state that, of the offals included in these returns, the middlings from both systems of milling were worked down to the quality known on the Mark Lane market as "coarse mids., fair average," the bran to "bran from stones" and "bran from rollers," and the pollard to "pollard, fair average."

Gluten in bread.—From an economical standpoint it may be said the nutrition of bread mainly depends upon the gluten, or, in other words, the nitrogenous or albuminous compounds or flesh formers, contained in the flour from which it is produced. The starch would be equally important if it could not be obtained from other sources in as suitable a form at a much cheaper rate—as in rice, Indian corn, and potatoes. But its gluten is not obtainable from other sources, of equal quality and flavour. Hence its special value as a constituent of wheat. Further, upon the gluten in flour depends the elasticity of the texture of the bread, and consequent freedom from density or heaviness. It is generally believed that upon the percentage of gluten in flour depends the *yield* of bread that may be obtained from it, as illustrated by the Hungarian flours, which are almost unequalled for yield of bread, and rank high in gluten, but this is erroneous, as proved by the experimental workings now under review. It will be found that the flours high in gluten do not produce the most bread, unless, at the same time, they possess a high degree of *dryness*, for it is upon the *dryness* of a flour that the yield of bread mainly depends, and not upon the gluten. The two lots of flour from Russian wheats (Nos. 11 and 12) are those which are highest in gluten, yet they do not yield as much bread as any of the four Indian wheats (Nos. 1 to 4), and the difference in yield from the latter would have been still further increased had they not been previously mel-

lowed with water, as noted, before milling; confirming it is the dryness of a flour that determines the yield of bread.

Another erroneous idea is, that upon the quantity of gluten present depends the height or loftiness of the bread. This would be correct, provided the fermentation of the dough were in all cases carried to a precise degree; but it varies widely, and it will be found the loftiness or height of the bread depends chiefly upon a high degree of fermentation, provided it be not carried to great excess, rather than upon the gluten. This is illustrated by the bread consumed in the London district, which is made from flours rich in gluten, yet is not so high or lofty as the bread consumed in some other districts, which is produced from flours containing much less gluten, the popular taste in London demanding strength, nutrition, and then fair colour, whereas, in the districts referred to, a high degree of whiteness is demanded before nutrition.

The four Indian Wheats.

In addition to the particulars contained in the foregoing returns, we have to report that to any one experienced in the requirements of the wheat and flour markets of the United Kingdom and, indeed, of most other countries, it will be evident there is no probability of these Indian wheats coming into demand for manufacture into flour *without a liberal admixture* of other wheats. They all possess in a marked degree the same characteristics of great dryness, and a distinct beany and almost aromatic flavour, inseparable from wheats grown in the climates and soils of the tropics. Also the flours are ricey, the texture of the breads is too close, and the crust is hard and brittle. But these characteristics do not detract from their usefulness in any important degree. As it well known a miller cannot show skill in his craft to greater advantage or profit than that with which he selects his wheats, and mixes his grists, so as to produce to best advantage a flavour from which bread can be made of the colour, bloom, strength, and flavour desired, and with all a good yield.

We pronounced them to be exceedingly useful wheats, in fact hardly equalled for what is deficient and wanting in the English markets by any other wheats. Their chief characteristics are just those in which the wheats grown in our variable climate are most deficient. Their great dryness and soundness renders them invaluable for admixture with English wheats that are in any degree out of condition through moisture, and the great proportions of the wheats harvested here have been in that condition for some years past, a condition that must prevail in all other than that of wheats harvested and stored during fine and favourable weather; and this the English farmer knows, greatly to his cost, is a state of climate that is, by a long way the exception rather than the rule. Added to their dryness, the thinness of the skins of these wheats and consequent greatness of the yield of flour, must always place them in the front rank as a "miller's" wheat, whenever they are handled with reasonable intelligence and skill.

Such unprecedented yields of flour, as shown by these wheats, ranging (by ordinary grinding from 77.46 to 80.52 per cent. against English 65.2 and American spring 72.2, speaks volumes in their favour, and their value is still further increased by another point of merit of almost equal importance, viz., a larger percentage of bread

may be obtained than from any other of the flours included in this review.

That, for the best of these Indian wheats (the fine soft white), on the day they were valued on Mark Lane market, a price was offered as high as that for American winters, New Zealand or English (see list of values in synopsis), proves that the great value of the Indian wheats is becoming recognized here, a knowledge that will ere long extend to all our markets. The other lots of Indian (Nos. 2, 3, and 4) were lower in value to the extent of 4s. to 5s. per quarter, as might almost have been expected from the difference in colour and other characteristics; still, as these latter wheats become better known here, this difference in price will be somewhat lessened. Their beany flavour is not a serious obstacle, as fair average deliveries, when well cleaned and properly dealt with, can be employed in the proportion of 25 per cent. to 50 per cent. along with home-grown or other wheats, such as Americans, possessing a fine sweet, milky, or nutty flavour.

Glancing at all the facts here elaborated, it is evident that these wheats afford a larger margin of profit both to the miller and baker than any other.

We venture to record a conviction we have long held, strongly emphasized by the results of these experimental workings, of the measureless importance of the great resources of the Indian Empire being developed to the utmost in producing wheat for this country. Farmers here are finding that to live they must produce beef and mutton rather than grain, hence the greater need of resources of supply under our own control.

It is evident such a conviction is common to the members of your Honourable Council, as testified by their unceasing efforts in this direction. And we desire heartily to congratulate them upon the important fruits arising from their labours. The character and general excellence of the Indian wheats are improving with the deliveries of each successive season. The Indian wheats now especially under review were delivered to us in excellent condition (see details) with freedom from dirt (except Lot No. 3), barley, gram, and other impurities, also with a freedom from weevil, rarely equalled by Indian wheats, except the prime parcels of the past season, and there is no doubt an outlet in this country and the European continent for unlimited quantities and prices that shall prove remunerative to all parties concerned, either in their growth, transportation, or conversion into flour and bread.—We have, &c.,

McDOUGALL BROTHERS.

15th December 1882, 10, Mark Lane, London.

BOMBAY CHAMBER OF COMMERCE, 19th November, 1883.

The ACTING UNDER-SECRETARY to GOVERNMENT, Revenue Department, Bombay.

SIR,—I am directed to acknowledge the receipt of Government Resolution No. 7137, dated 24th September last, forwarding, for the use of the Chamber of Commerce, a copy of a report on Indian

wheat prepared at the request of Her Majesty's Secretary of State for India by Messrs. McDougall Brothers.

In thanking His Excellency the Governor in Council for this communication, the Committee desire me to suggest that a paragraph be added to the report stating where the wheats described were grown and from what ports they were shipped, that the report be translated into the French, German, and Italian languages, and extensively circulated in the large markets on the Continent of Europe as well as in England, it being more important to make known to buyers and consumers the excellent qualities of Indian wheats than to the cultivators who will certainly grow the wheat if a market is found.

The Committee desire me to express their hope that His Excellency will kindly recommend the Government of India to give effect to these suggestions at an early date.—I have, &c.,

J. GORDON, Secretary.

No. 880.

REVENUE DEPARTMENT,

BOMBAY CASTLE, *29th January, 1884.*

Letter from the SECRETARY to the CHAMBER of COMMERCE, Bombay, dated 19th November 1883 :—

"I am directed to acknowledge the receipt of Government Resolution No. 7137, dated 24th September last, forwarding for the use of the Chamber of Commerce a copy of a report on Indian wheat prepared at the request of Her Majesty's Secretary of State for India by Messrs. McDougall Brothers.

"2. In thanking His Excellency the Governor in Council for this communication the Committee desire me to suggest that a paragraph be added to the report stating where the wheats described were grown and from what ports they were shipped, that the report be translated into French, German and Italian languages, and extensively circulated in the large markets on the Continent of Europe, as well as in England, it being more important to make known to buyers and consumers the excellent qualities of Indian wheats than to the cultivators who will certainly grow the wheat if a market is found.

"3. The Committee desire me to express their hope that His Excellency will kindly recommend the Government of India to give effect to these suggestions at an early date."

Memorandum from the Officiating Under-Secretary to the Government of India, No. 33-A., dated 15th January 1884—Forwarding for information, with reference to the letter from this Government, No. 8909 of the 4th ultimo, copy of the following despatch addressed by them to Her Majesty's Secretary of State for India, No. 1, dated 15th January 1884 :—

"We have the honour to forward the enclosed communication received from the Government of Bombay, with reference to the

report on Indian wheat by Messrs. McDougall Brothers, received with your Lordship's despatch No. 91, dated the 14th June last, which has, in accordance with your Lordship's wishes, been widely circulated in this country.

"2. We shall be glad if your Lordship will obtain the additional information asked for by the Bombay Chamber of Commerce as to the parts of the country in which the wheats experimented on by Messrs. McDougall Brothers were grown and the ports from which they were shipped.

"3. We desire also to cordially support the recommendation of the Chamber of Commerce that the report be translated and extensively circulated in the large markets on the Continent as well as in England."

RESOLUTION.—To be communicated to the Chamber of Commerce, Bombay, with reference to their letter, dated 19th November last.

J. MONTEATH,
Acting Under-Secretary to Government.

APPENDIX G.

WHEAT CULTIVATION IN THE PUNJAB.

No. 321.

LAHORE, 5th October, 1883.

From R. G. THOMSON, Esq., Offg. Under-Secretary to Government, Punjab, Revenue Department, to the SECRETARY CHAMBER of COMMERCE, Bombay.

SIR,—I am desired by the Lieutenant-Governor to forward, for the use of the Chamber of Commerce, 25 copies of the Proceedings of this Government, No. 5 of October 1883, relating to wheat cultivation in the Punjab.—I have, &c.,

J. SAVILLE,

For Offg. Under-Secy. to Govt., Punjab, Revenue Dept.

Proceedings in the Revenue and Agricultural Department A-5, October 1883.

No. 1147.

17th September, 1883.

From E. B. FRANCIS, Esq., Offg. Junior Secretary to Financial Commissioner, Punjab, to the OFFICIATING JUNIOR SECRETARY to GOVERNMENT, Punjab.

In reference to your No. 110, dated 26th April last, and subsequent reminders, I am directed to forward in original, for the information of Government, an intermediate communication from the Commissioner of Settlements and Agriculture relative to wheat cultivation in the Punjab, stating the reasons of his inability to reply more fully at present to the enquiries made by Government, and enclosing for the perusal of His Honor the Lieutenant-Governor a copy of his circular addressed to all Deputy Commissioners on the subject.

2. It will be seen that careful enquiries are being made by Colonel Wace into all points relating to the cultivation of wheat on which it is desirable to obtain information as suggested in the Government letter above quoted; also as to the steps which can be taken towards encouraging the growth of better classes of wheat, and improving the practices of the trade. But to do all this, time is required, and Colonel Davies thinks it is not advisable to hurry the Commissioner of Settlements and Agriculture.

No. 363.

LAHORE, 4th September, 1883

From Lieutenant-Colonel E. G. WACE, Commissioner of Settlements and Agriculture, Punjab, to the OFFICIATING JUNIOR SECRETARY to FINANCIAL COMMISSIONER, Punjab.

As the Junior Secretary, Government, Punjab, in his No. 233, dated 13th August, presses for a reply on the subject of wheat cultivation in the Punjab, I have the honor to ask that the enclosed copy of a circular letter No. 804, dated 21st June 1883, addressed by me to Deputy Commissioners, may be laid before Government.

2. The wheat sowings are now so near that no steps now to be taken could influence this season's crop. On the other hand, if I hurry District Officers in their replies the results of the enquiry will be partly spoilt.

3. I am obtaining with fair rapidity returns of the areas cultivated with each variety of wheat and also 2 lbs. samples of each variety, and these will shortly be classified by the aid of the best advice that I can obtain at Lahore.

4. As to the mixing of the crop, varieties of wheat are rarely grown mixed, and the more valuable kinds need and receive both irrigation and the best husbandry.

5. For the mixing of the different varieties of wheat and also I think for the dirty state in which it reaches the export harbours, the cultivator is in the Punjab but little responsible. These evils occur in the minor trade transactions which take place between the removal of the grain from the field and its loading up into the railway trucks. The entire arrangements of these minor grain dealers are of the roughest nature.

6. I state these conclusions intermediately. The results of the whole enquiry will shortly be laid before the Financial Commissioner. But meantime it may be useful to tell the Chambers of Commerce which have addressed Government that in the Punjab the cultivation of the finer kinds of wheat is usually very clean and careful, that the cultivators are not in a position to clean the grain with winnowing machines, and that most of the mixing and dirtying of the grain occurs not in the field, but in the trade transactions which occur after the removal of the grain from the field.

No. 804.

LAHORE, 21st June, 1883.

From Major E. G. WACE, Commissioner of Settlements and Agriculture, Punjab, to all DEPUTY COMMISSIONERS, Punjab.

I am directed by Government and by the Financial Commissioner to address you on the subject of paras. 21 and 22 of the Public Works Department, Resolution No. 6436, dated 28th November last, which you will find in the *Punjab Gazette* of the 11th January 1883.

2. The Honorable the Lieutenant-Governor wishes—

(i) that the chief firms of merchants exporting grain and the

most intelligent agriculturists should be consulted as to how cleaner, finer and less mixed grain can be secured for the export trade ;

- (ii) that samples of the different classes of wheat recognised by the English trade should be made available for inspection in each tahsil and at each principal mart, and the Financial Commissioner further suggests that such samples should be placed in every Patwarkhana ;
- (iii) that a broadsheet urging the cultivation of better wheat, and its better preparation and preservation for the market, be distributed to all Zaildars and Patwaris in the principal wheat-producing districts.

3. In order to give effect to Government's wishes, I have the honor to request that you will send me one seer samples of each of the kinds of wheat cultivated in your district, with a statement in the form annexed. The samples should be put up in bags. The object of collecting these samples is to ascertain the present distribution of the different kinds of wheat. On receipt of the samples, an attempt will be made to classify them according to the nomenclature of the English market ; and it will then be possible to distinguish by the names locally current the varieties preferred in the European market, and to place samples of such in the principal marts. It is particularly requested that the samples be good of their kind, and there should be sewn on to each sample-bag a ticket giving—

Name of district.

No. of sample in list.

Local name of the sample.

4. In the next place I request the favour of your consulting the chief grain merchants and some intelligent agriculturists on the subject referred to in para. 2 (i) of this letter, and in paras. 21 and 22 of the Government's Resolution. In preparing the broadsheet suggested by Government, it would be desirable to propose such remedies as are capable of successful adoption. For instance, the finer kinds of wheat can only be cultivated on land advantaged by irrigation or by an abundant rain-fall. And it should be ascertained whether it is the cultivator that garners the grain in a dirty state, or whether the dirt is added when the grain is sent to market ; and if so, whether by the cultivator or the trader. Clearly the remedies which it is proper to suggest depend primarily on the answer to these questions. If, however, inquiry shows that the cultivator is indifferent to the proper cleaning of the grain, it will still be for consideration whether in the existing conditions of his husbandry, and of his relations with the grain-dealers, we must look for the required cleaning of the grain to him or to the grain-dealer. It is also worth inquiring whether in cases in which a cultivator does not market his grain but stores it, he is alive to the necessity of storing it in clean condition. There is no question as to the interest of the exporter, nor as to the interest of the large grain-dealer who sells to the exporter. They must clean the grain ; if they do not, a great deal of avoidable loss is suffered by them. But self-interest, trade, and profit are keen dividers of labour ; and having regard to the circumstances of the cultivator, and the facilities at his command, is

he so interested in making over his grain to the grain merchant in a clean state as to make it worth his while to attend to the matter?

5. In respect of the habit of sowing wheat mixed with other crops, you are requested to state generally to what extent this prevails, and the motive for which it is practised. It is resorted to on good and safe lands, or is it confined to the unirrigated lands and relied on at a protection against the total failure of the produce, or for what reason? In addition please report especially whether it is common to sow mixed different varieties of wheat, or whether the mixing of such varieties occurs in the grain stores.

6. I would also ask the favor of your reporting whether any, and if so, what arrangements have recently been introduced by the grain-dealers with the object of cleaning the grain before its despatch for export, and whether any agencies for the despatch of grain in large quantities to export towns or direct to Europe have recently been established in the principal marts of your district. From what I have heard independently, I believe that a great deal is being done in these directions in the larger marts of the province.

7. A brief account of the principal grain marts, of the transactions of each for the past three years, and of the principal traders and agencies, will be very acceptable and add to the value of your reply, as also if you will state the varieties of wheat hitherto most preferred for export by the local traders.

8. In districts under Settlement a copy of this circular is being sent to the Settlement Officer also, in order that he may assist the Deputy Commissioner in furnishing the information called for.



Descriptive List of Samples of Wheat grown in the District.

1 Serial No. of Sam- ples.	2 Local name or names.	3 ROUGH ESTI- MATE OF AREA ANNUALLY SOWN BY EACH KIND.			4 Ear, bearded or beardless.	5 Whether usually mixed with other crops, and if so, with what crops.	6 Description of soil on which usually sown, and for which it is most suited.	7 Whether hardy or requiring careful cultivation and irrigation.	8 Present price (seer per rupee).	9 Whether preferred for daily food or for use at feasts and in confec- tionery.	10 Exported or not, and whether to a large or small extent.
		Irrigated.	Sailab.	Barani.	Total.						

N. B.—It is not expected that more than a rough estimate be given in column 3. But the total of the whole Statement should agree with the crop returns of the district.

BOMBAY CHAMBER OF COMMERCE, 20th December, 1883.

To the OFFICIATING UNDER-SECRETARY to GOVERNMENT, Punjab,
Revenue Department, Lahore.

SIR,—I am directed by the Committee of the Chamber of Commerce to acknowledge, with the thanks of the Chamber, your letter No. 321, dated the 5th October, forwarding 25 copies of the Proceedings of the Punjab Government, relating to wheat cultivation in that Province ; and to ask you if you will kindly favour the Chamber with copies of the results of the enquiries therein referred to, when these have been received by Government.

I have also the honor to forward herewith 5 copies of the letter which was addressed by this Chamber to the Bombay Government, on the 2nd October last, on the subject of the admixture of dirt, other grain, or other foreign substances with wheat in this Presidency and the Central Provinces, and the Resolution of the Government thereon. —I remain, &c.,

J. GORDON, Secretary.

APPENDIX H.

REDUCED RAILWAY RATES AND SUEZ CANAL DUES FOR WHEAT.

BENGAL CHAMBER OF COMMERCE, CALCUTTA, 26th June, 1883.

J. GORDON, Esq., Secretary, Chamber of Commerce, Bombay.

DEAR SIR,—The memorial presented by your Chamber to the Governor-General in Council on the 12th October 1872 praying for the repeal of the export duty in Indian wheat resulted in the remission of the duty from the 4th January of the following year.

The removal of that heavy tax—about 10 per cent.—on an article of comparatively small value, gave a considerable impetus to the trade, which has since expanded in a remarkable manner and has now assumed importance enough to justify the public in looking forward to a time when, if properly encouraged, it may compete successfully with that of America in supplying the requirements of the United Kingdom.

It is unnecessary to give here the statistics of the exports of wheat during the past 10 years ; it will be sufficient to record the fact that in 1881-82, the exports from the Bengal and Bombay Presidencies amounted to nearly one million tons (1,98,63,520 cwt.) valued at 8 millions sterling ; and of that quantity about half was shipped to the United Kingdom, and half to the Continent of Europe.

In 1881 the importations into the United Kingdom from America were about 1,800,000 tons, of the value of about 20 millions sterling ; and the above figures go to show that the control which America has so long had of the European markets is being materially lessened by the gradual development of the grain-producing capabilities of India.

In a recently published pamphlet—"Indian Wheat *versus* American Protection, or the influence on English Trade and American Protection of the Development of India,"—copies of which have been forwarded for your information, the author has discussed with exceptional ability the main causes which are retarding the growth of the wheat trade of this country, its present position and future prospects, and the probable effects of the progress of that trade on certain branches of British commerce.

The chief contentions are—(1) that India is more than able to compete with America as regards the prime cost at which wheat can be raised and placed in the market ; (2) that even allowing for the higher ocean-steamer freights from British Indian ports to England, this country, as a source of supply, has an undoubted superiority over America ; (3) that in point of quality Indian wheat is not inferior

to American, and (4) that the area of cultivation in India can be so extended as to supply the whole home demand, provided proper facilities and inducements are offered to bring the whole of the wheat-producing districts of India under a proper system of cultivation.

And in all these respects the writer adds—"Thus, whether the question be viewed from the point of area, of quality, or of price, it appears that after making the fairest allowance for the disadvantages against her in the matter of ocean-freight, India should be the principal source of supply for the wheat demand of England."

The author then proceeds to consider the question, why India has not attracted more of the English wheat trade ; why it has not, in fact, monopolised it : and he answers the question by declaring that to bring into the open markets of the world the wealth of the agricultural produce of India, what is mainly required is *cheap* communication between the interior districts and the coast ; and it is in this respect that India is so immeasurably behind her rival.

After various cogent arguments in favour of the development and extension of cheap railway communication, as being vital to the material prosperity of the agricultural classes of India, that the produce of their lands may have ready access to the markets of Europe, the author concludes by urging the more rapid construction of railways, and an improved system of working them more cheaply than is the case at present.

The pressing necessity for a more rapid extension of cheap railway communication, and for a reduction of rates on the present railways as far as can be conceded without loss to the Railway Companies or to Government, having regard to increased receipts from increased traffic, has already been brought prominently by this Chamber to the notice of the Viceroy and Governor-General, in a letter dated the 10th of last March, copies of which have been placed at your disposal, and the Chamber have received His Excellency's assurance that the important subject of their representation will receive His Lordship's early and careful consideration.

Apart, however, from the results of railway development there are other means by which the Indian wheat trade can be assisted ; and the writer of the pamphlet we have mentioned suggests that the trade in wheat in each Province should be narrowly looked into, with the view of having every charge in transit, tolls, canal fees, port dues, &c., either abolished or reduced to a minimum.

And this leads to the consideration of the more immediate subject of this letter, viz., whether an endeavour should not be made by the united action of the Chambers of India interested in the matter to bring under the notice of the Suez Canal Directory the expediency of assisting the wheat trade of this country. By a liberal reduction in the canal dues on the proportion of tonnage of each homeward bound ship represented by her wheat cargo, the wheat trade would be encouraged and increased to an extent which, it is thought, would more than recoup the Canal Company for such reduction.

The better India is enabled to compete with America in supplying Europe with wheat the better it will be for the Canal Company, for American wheat does not help its income, and it is to the Company's

interest to encourage the expansion of the Indian wheat trade as far as it legitimately can.

It is believed that with reduced railway rates and other intermediate charges Indian wheat could be placed on the markets of England and Europe at a cost not exceeding that which American wheat now realises, and the volume of the trade would largely expand, while the Canal traffic would assume proportions of greater magnitude with greater earnings for the Company.

Requesting that you will favour my Committee with the views of your Chamber on the subject.—I remain, &c.,

H. W. J. WOOD, Secretary.

BOMBAY, 13th July, 1883.

H. W. J. WOOD, Esq., Secretary, Bengal Chamber of Commerce, Calcutta.

DEAR SIR,—Your letter of the 26th ultimo, in which you ask the views of this Chamber as to whether an endeavour should not be made by the united action of the Chambers of India to bring under the notice of the Suez Canal Directory the expediency of assisting the wheat trade of this country by a liberal reduction in the Canal dues on the proportion of tonnage of each homeward bound ship represented by her wheat cargo, has been laid before the Committee of this Chamber.

They had directed me to inform you that the proposal had their entire approval, though they would have preferred that the representation were made in behalf of trade generally; and the great importance at the same time set forth of a liberal reduction being made in the Canal dues on homeward bound cargoes of wheat, on account of the many disadvantages under which this country labours in her competition with America in that article. Before this letter, however, had been despatched, the public telegrams received yesterday announced that an agreement had been made between Her Majesty's Government and M. de Lesseps providing for the construction of another Canal, and for the reduction of the present tariff on January 1st next year, with other concessions. It is not stated what this reduction amounts to, but the Committee of this Chamber presume that your Chamber will probably now deem it desirable to hold the proposed representation in abeyance until further information in respect to the new tariff is received. On this point, however, they will be glad to hear from you.

In conclusion, they desire me to add that they will at all times be happy to co-operate with your Chamber in every effort to encourage the expansion of the Indian wheat trade in every possible and legitimate way.—I remain, &c.,

J. GORDON, Secretary.

BENGAL CHAMBER OF COMMERCE, CALCUTTA, *6th August*, 1883.

J. GORDON, Esq., Secretary, Chamber of Commerce, Bombay.

DEAR SIR,—Your reply of the 13th ultimo to this Chamber's representation of 26th June relative to the proposed common action of the Indian Chambers for reduction of Suez Canal dues on cargoes of wheat from this country was duly submitted to, and considered by, my Committee, who were of opinion that under existing circumstances it may be premature to urge this matter on the Suez Canal Directory, and they will, therefore, wait for a more favourable opportunity for taking up the question.—Yours faithfully,

H. W. J. WOOD, Secretary.

APPENDIX I.

PETROLEUM LEGISLATION IN INDIA.

BOMBAY CHAMBER OF COMMERCE, *7th February, 1883.*

To the SECRETARY to GOVERNMENT, General Department,
Bombay.

SIR,—I am directed by the Committee of the Chamber of Commerce respectfully to submit, for the consideration of His Excellency the Governor in Council, the following representation on the subject of petroleum legislation in India.

When the Petroleum Bill was introduced into the Legislative Council of His Excellency the Governor-General, the Chamber, in August 1880, after a full discussion of the whole question, unanimously resolved that legislation was unnecessary and would seriously restrict the important and rapidly growing trade in petroleum. This opinion, and the discussion on which it was formed, were duly communicated to the Government of India. Since the passing of the Act, a good deal of difficulty and uncertainty has arisen from the belief that thorough reliance cannot be placed on Abel's system of testing in India; inconvenience and loss have been caused to importers in Bombay and Calcutta by the inadequacy of the organization provided to carry out the provisions of the law, while importations are subject to the excessive risks of rejection or confiscation if they do not come up to the legal standard.

The difficulty of framing rules that would satisfy the requirements of Government, and at the same time relieve the trade from unnecessary risk and restriction, has doubtless weighed with the Local Government in inducing them to defer making any rules under the Act, until the results of the scientific investigations, which, it is understood are now being conducted in Calcutta, are ascertained.

The unsatisfactory working of the Act is attributable to the doubts attaching to the trustworthiness of Abel's system of testing, to the change (if any) which the oil undergoes in transit, and to the question whether any alteration in the standard is necessary; and it is apprehended that a long time must elapse before these and other questions at issue are conclusively determined. It has therefore been represented to the Chamber by leading firms largely interested in the commerce of petroleum that this important trade would be relieved of the risk and uncer-

tainities surrounding it, and would be greatly facilitated, if the following suggestions, which have been submitted to His Excellency the Viceroy, were adopted by Government, viz. :—

- (a) "The finality of New York inspection under conditions satisfactory to the Government of India."
- (b) "No alteration in the present standard unless (or until) scientific investigation proves *conclusively* a change in the character of the oil in transit equivalent to ——— degrees, when notice of one year should be given as to any amendment deemed necessary to accord therewith."

The Committee, after carefully considering these suggestions, are of opinion that the first one, (a), would meet the requirements of exporters as well as of importers of oil, and that certificates of quality given at the port of shipment might, under conditions satisfactory to Government, be accepted as final. With regard to the suggestion, (b), they believe that any advance in the present standard of 73° of Abel's test is not only unnecessary for the public safety, but would impose a serious restriction on the trade. If, however, any change in the standard is decided on, they respectfully submit that it should not be altered without sufficient notice being given to protect those engaged in the trade, which is necessarily conducted on the footing of buying and selling for future delivery.

The Committee therefore desire to submit these suggestions to His Excellency the Governor in Council, and to express their hope that as the suggestions seem to be well calculated to facilitate the trade in petroleum, His Excellency may be pleased to recommend them to the favourable consideration of the Government of India.

The Committee direct me to append hereto, for His Excellency's information, a printed copy of a communication on this subject dated Calcutta, 21st December 1882, addressed by Mr. W. H. Libby, of New York City, to His Excellency the Viceroy and Governor-General.—I have, &c.

JAMES THORBURN, Chairman,
J. GORDON, Secretary.

Extract from a paper "On the Flashing Test for Petroleum" by Professor ABEL, C.B., F.R.S. (reprinted from Journal of Society of Chemical Industry, December 1882).

The Germans no sooner adopted the "Abel" test than they discovered a flaw in it. In testing the same oil in different parts of

Germany, differing very considerably in altitude, they found very decided variations, which could not be ascribed to the differences in the apparatus used. I should tell you that it was provided in the Act by which the test became legalised with us, that any apparatus submitted to the Board of Trade should be standardised, and thus rendered a legal apparatus. When first the test was adopted a large number of the apparatus were submitted to the Weights and Measures Department of the Board of Trade. My assistant (Dr. Kellner) at first undertook the duty of standardising them, and it was found that a very large proportion of those which were sent in exhibited very little variation indeed. Although a number were rejected as differing from the standard, it was possible, by allowing a little variation in the length of the spout of the test lamp, to compensate for small variations in many instances, and thus accurate apparatus could be issued without any difficulty, varying at most only one degree Fahr., either above or below the standard apparatus. This variation is, of course, quite independent of any possible personal error in the testing operation. In standardising the apparatus it is, of course, unnecessary to employ any particular standard sample of oil, and such course would obviously be objectionable, at it would be almost impossible to preserve a sample for any length of time without its altering in flashing point. The apparatus are tested by comparison with a standard apparatus, with which the oil to be used in the operation has, first of all, been carefully tested, and simple arrangements can be made to eliminate or correct, any exceptional conditions which might possibly prevail at the time of standardising. Therefore, there is no excuse for the existence of legalised apparatus differing from the standard, excepting within the very narrow limits I have named. When the first few apparatus were made they were absolutely identical, but it is easily conceivable that some differences will be exhibited among a large number of apparatus provided by different makers. But such differences need not interfere with the attainment of accurate results, provided that the nature and extent of variation of an apparatus from the standard are marked upon it—a precautionary measure which has, however, unfortunately not yet been adopted by the standardising department of the Board of Trade. There can be no question that the standardising of the apparatus issued for the testing of petroleum should not be optional, but compulsory, and that no apparatus should be sold unless duly standardised and properly marked with any correction to be made in its indications. That this has not been the case hitherto has already led to the possibility of serious disaster. It has been found, for example, that apparatus which have been sent abroad differ 4° or 5° from an apparatus properly standardised. This should not be if the proper Government department puts its shoulder to the wheel and adopts the measures necessary for ensuring uniformity in the use of the test.

To return to the Germans. They no sooner worked with the apparatus than they found the variations, in the results furnished by the identical samples, to which I have referred. Thus an oil tested in Munich gave different results to a sample of the same oil tested in Berlin. It was not long before they traced these variations to differences in the height of the barometer, and they at once proceeded to make some experiments in pressure apparatus, and by the results obtained they considered themselves justified in preparing and issuing

tables—firstly, for indicating the temperature at which the test should be commenced, according to different indications of the barometer; secondly, for corrections in the shape of deductions or additions to be made from or to the observed flashing point, according as the barometer stood high or low. The necessity for such corrections had, I must confess, escaped me when I elaborated this test. I had not thought it would be necessary to take account of comparatively slight variations of the barometer, and the general employment of the test in different parts of the world differing greatly in altitude had not occurred to me. But the German observations, and also some difficulties that have recently arisen in the application of the test in India, have led me to look into the matter, in association with Mr. Boverton Redwood, and we found that there were certainly very tangible evidences of the influence of barometrical changes upon the flashing point of an oil, provided that the oil was for a sufficient period exposed to the influence of the change in the atmospheric pressure.

A sample of petroleum oil, which I need hardly remind you a liquid of complex nature, consists of hydrocarbons of comparatively high boiling points, containing in solution more or less considerable proportions of comparatively very volatile hydrocarbons, some portions of which exist naturally as vapour at ordinary temperatures. The tendency of these to escape from solution when the liquid is exposed to the air will obviously increase with a diminution of atmospheric pressure. But it appears to be necessary especially in the case of hydrocarbons which are not of the most volatile kind, that a decided change in atmospheric pressure would prevail some little time before its influence upon the facility with which vapour escapes from the liquid—in other words, its influence upon the flashing point of the oil—becomes manifest. In order to obtain evidence whether and to what extent the flashing points of petroleum oils might be affected, under natural conditions, by variations in atmospheric pressure, Mr. Boverton Redwood proceeded to Switzerland a short time since, taking with him five samples of petroleum oil of different flashing points, which were sub-divided and carefully

No. of Sample.	Barometer.	London. 30"	Paris. 30"·15	Bouvet. 28"·75	Visp. 27"·5	Chamounix. 26"·425	Zermatt. 24"·3	Riffel. 21"·5
	Flashing point							
1		71°	71°	68°	66°	63°	60°	55°
2		73	73	70	68	64	62	56
3		76	76	73	71	68	65	63
4		78	78	75	73	70	67	64
5		85	85	83	80	78	75	70

Difference in barometer from London observation 1"·25 2"·5 3"·575 5"·7 8"·5
Mean difference in flashing point per inch of barometer...2"·05 2" 2"·238 1"·93 1"·76

sealed up in a number of small cans of such construction as to yield to desired variations in the height of the barometer. The flashing

points of these oils were first carefully determined in England, with the barometer at 30in. On his reaching Paris Mr. Redwood re-tested samples of these oils when the barometer stood at 30·5in., and he obtained practically the same flashing points as before he started. He afterwards tested samples of the five oils at the several localities shown in the foregoing table, and obtained the results there given.

You will perceive that the results seemed to indicate an average variation of about 2° Fahr. for every inch of barometer in the flashing points of the oils. This variation corresponds to some extent with that observed by the Germans in their experiments; they found a difference of about 1·6 for every inch of barometer. For example, in the table of corrections which they have prepared, it is stated that an oil which at 29·92 inches barometer flashes at 73·4, will flash at 30·92 inches at 75°—a difference of 1·6 per inch of barometer. But the German experiments were made in a pressure apparatus, and probably sufficient time had not elapsed between the alteration of the pressure and the determination of the flashing point for the change in pressure to exert its full influence. In Mr. Redwood's observations, the flashing points, taken at the last station in the list (the Riffel), were observed soon after his arrival there, as he had to leave somewhat hurriedly, and it will be observed that, in this instance, the numbers obtained did not show so great a reduction as in the other cases. It will, I think, be evident from the few observations I have offered, that this question of the influence of pressure upon the flashing point of an oil merits more attention and a more complete examination than it has yet received.

The next point to which I have to direct attention is one of considerable importance; it is the question of the influence which is exercised upon the results obtained with the flashing test by the temperature of the oil at the time it is tested, and the conditions in regard to temperature under which the oil has been preserved before the test is applied. To some extent the necessity for attending to these points was recognised when first the test was brought out, and in the Act it is prescribed that if the temperature of the air exceed 65° Fahr. when the test is to be applied, the oil is to be cooled down to 60° before being tested, and this precaution has appeared to be quite sufficient to ensure the attainment of trustworthy results in England. But quite lately the question of temperature has become important in connection with the importation of petroleum oil into the East Indies. About two years ago the Indian Government decided to adopt the English Petroleum Act in its integrity, so far as the application of the test was concerned. It was recommended in the first instance by professional authorities in the country that so low a temperature as 73° should not be adopted as the minimum flashing point of safe petroleum for India, and a higher minimum was at first fixed upon; but the authorities in India appear to have yielded to arguments of a not very sound nature, urged by representatives of trade interests, and the regulations of the English Act were adhered to. Moreover, the English directions for applying the test were adopted without any consideration as to whether they were in all respects applicable under every condition liable to prevail in a tropical climate. Last spring some shipments of petroleum were made to Calcutta, the flashing points of which, as

determined in New York, were stated to have been mostly over 73°, and in no instance below that temperature. On arrival in Calcutta they were found to be considerably below 73°. The cargoes were detained, and great complications arose. The result was that the question was raised for the first time whether a flashing test as prescribed for this country was one which could safely be adopted without modifications for India. This question being addressed to me by the authorities, I emphatically answered, "No;" and stated that the differences in climatic conditions were so great, that I could not conceive it possible to obtain reliable results with the flashing test in India without some modification of the instructions for its application. The subject being one of pressing importance, I proceeded at once to institute a few experiments, in conjunction with Mr. Boverton Redwood, at Woolwich, for the purpose of ascertaining the kind of influence which existed by prolonged exposure to different temperatures upon the flashing points of oils, and the conditions to be attended to in obtaining with oils which had been exposed to tropical temperatures results comparable with those originally furnished by the samples. The carrying out of the test in an apartment where the atmosphere was tropical was not found to be attended with any difficulty or fallacious results, provided the apparatus itself was cooled down thoroughly just before use; but it was demonstrated that the flashing points of oils were considerably affected by their previous exposure to elevated temperatures, and that the mere cooling down the oil to 60 to 65 immediately before testing was not sufficient to restore the original flashing point to the sample. It was found necessary that the effect which prolonged exposure had in increasing the tendency to escape of the most volatile portions of the oil should be counteracted by a prolonged exposure to a lower temperature, in order to restore the oil to its normal condition—that is, in order to cause it to furnish the original flashing point. The cooling down, even for several hours, to a low temperature—*e. g.*, by means of ice—of a sample the flashing point of which had become reduced several degrees by the effect of prolonged preservation at a tropical temperature, was insufficient to restore it to its original condition. Several days' exposure to cold was found necessary, in our experiments, to cause samples thus altered by the effects of heat to resume their original flashing point. Since these experiments were made, Mr. Boverton Redwood has visited India with a view to examine into the subject, and to consult with chemists who have given much attention to the test, on the spot. This visit has been attended by instructive and beneficial results, which, however, it is not in my power to enter into now.

It is a question, of course, whether an oil tested in New York or in England and found safe, can be considered safe when, on arrival in India, its flashing point has become considerably reduced, so that it can only be made to answer the original test of safety by prolonged exposure to artificial cold—a condition of things which would not be likely to attend the use of the oil in this country. This bears distinctly upon the question as to what should be considered the safe flashing point of an oil *in India*, a question which I do not propose to deal with on the present occasion. My desire was to give you an account of the nature of the new flashing test, and also to point out difficulties which under some conditions may attend its employment—

difficulties which naturally arise out of the precision and delicacy of the test under normal conditions. I have also desired to show that there are points of interest and importance, connected with its employment under various atmospheric or climatic conditions, much meeting the further careful study which they are now receiving at the hands of competent workers at home and abroad.

DISCUSSION.

The Chairman then said he was sure all had listened with great interest to Professor Abel's address. Dr. Siemens had said that gas was the poor man's friend, but he thought that petroleum was certainly the poor man's friend, as it was in general use among the poor; therefore he felt that Professor Abel's labours were of great interest to the public at large. He then invited discussion upon the lecture.

Mr. Boverton Redwood said: Mr. Chairman and gentlemen, my chief object in rising is to bear witness to the very great services conferred by Professor Abel upon those who have to examine mineral oils, with a view to the determination of the flashing point. It has fallen to my lot for several years past to have a somewhat extended experience of the use of the old system of testing with the open vessel apparatus, and also, since its adoption, of the system of testing which Professor Abel has devised; and I have no hesitation in stating that the superiority of Professor Abel's system over that previously in use is so great that it is hardly fair to compare the two systems. I have a very lively recollection of the difficulties which arose in the use of the old system; of the disputes which arose whenever it became a question as to the precise flashing point of a sample of mineral oil. These were exceedingly difficult to deal with, as you will readily understand from Professor Abel's address. In my judgment his system reduces errors to a minimum. It may be interesting that I should state that when recently in Berlin the gentlemen, who were charged with the investigation by the Government, showed me twenty different forms of apparatus which had been experimented on with a view to finding the best, and it is exceedingly satisfactory to know that in the result Professor Abel's system was adopted as by far the most accurate. As Professor Abel has referred to the results which I obtained in Switzerland, after conferring with him as to the line upon which such investigations should be made, and as he has called your attention to the fact that at the highest elevations my tests did not correspond with those obtained at lower elevations, I should like to add that the explanation which he gave is the correct one. On my arrival at Zermatt I tested the samples I had brought with me, and I found that these earlier tests were not such as corresponded with those I had previously obtained; but, after resting at Zermatt twenty-four hours, I again tested the samples, and found the results given upon the black-board. Now, I have no sort of doubt that if I had been able to remain upon the summit of the Riffel, for a similar time I should have obtained similar results to those previously obtained. I have recently visited India in connection with the difficulty to which Professor Abel has referred, and I made an examina-

tion there, under the conditions prevailing there, of samples of oil which I had taken with me, and it will be satisfactory to you to know that the results obtained under actual conditions corresponded precisely with those obtained under artificial conditions at Woolwich, as set forth on the black-board.

Mr. Dowling (of the Petroleum Association) begged permission, on behalf of the trade, to express to Professor Abel his great thanks for his having removed from their minds so many doubts and difficulties, and for having devised and apparatus not only useful to the scientific man, but also of the greatest use in the oil-merchant's counting-house. It had prevented danger to the consumer, and it had prevented the unnecessary annoyances to which the trade was previously exposed.

Mr. Ekin said it would be interesting if Professor Abel could explain why flashing points varied. Mr. Redwood said that, when he got to Zermatt, he found that the flashing point was less than it would be at ordinary pressures, but that after waiting some hours it varied still more, the liquid being kept in closed vessels. This was very curious. And again at Woolwich, the oil had been exposed to a tropical temperature, and after prolonged cooling, one does not see why the oil should go back to the original flashing point, because much of this hydrocarbon must have been given off. Of course, if the oil were kept in close vessels, that would explain it.

Mr. Macmillan enquired whether a short exposure to, say, 32° is equivalent to a prolonged exposure to a medium temperature in bringing back the oil to its original flashing point.

Professor Abel, in reply, said: I am afraid I cannot give a very satisfactory answer to the first enquiry, excepting that it is a fact that when an oil is exposed for some considerable time to a lower pressure or to a higher temperature, in a closed vessel of such construction as to yield sufficiently to external pressure, it has a tendency to flash at a lower temperature when afterwards tested. The tendency of the more volatile portions of these oils, under normal conditions, is to escape as vapour; that tendency is undoubtedly increased when we apply heat, and decreased as the temperature becomes lower. It seems to me that if the oil accumulates heat by preservation of the closed vessels containing it in a warm atmosphere, it is equivalent to rapid exposure to a higher temperature. When an oil, perfectly closed up, is exposed for some considerable time to a higher temperature, the volatile portions have obviously a greater tendency to escape than before, when the oil is afterwards exposed. The fact that time is required to develop the full influence of variation in atmospheric pressure is not, perhaps, at present susceptible of very lucid explanation. With regard to the question whether a short exposure to a very low temperature is equivalent to a prolonged exposure to a medium temperature, so far as the experiments have gone, a short exposure to a low temperature does not appear to have the same effect as a prolonged exposure to a comparatively higher temperature; that is to say, I do not think a very short exposure to 32° would have the same effect as a prolonged exposure to 50° Fahr. in bringing back the oil to its original condition. I speak with some reserve, because the subject is still under investigation.

No. 5048 OF 1883.

POONA, 3rd July, 1883.

From the COMMISSIONER of CUSTOMS, SALT, OPIUM, and ABKARI,
to the SECRETARY to the CHAMBER of COMMERCE, Bombay.

SIR,—As requested in your letter dated the 28th March last, I have the honour to forward, for the information of the Chamber of Commerce, a copy of revised draft Rules under the Petroleum Act VIII. of 1881, which I have submitted to Government this day, and to request that any observations or suggestions which the Chamber may wish to make with respect thereto may be submitted by them direct to Government. I further request that the copy of the draft Rules forwarded herewith may be returned to this office when no longer required.—I have, &c.,

C. B. PRITCHARD,
Commr. of Customs, Salt, Opium and Abkari.

REVISED DRAFT PETROLEUM RULES.

The following Rules for regulating the importation of Petroleum by sea in the Presidency of Bombay, made by the Governor in Council in exercise of the power conferred by Section 4 of the Petroleum Act, 1881, are published with the sanction of the Governor-General in Council, and under Section 18 of the said Act will have the force of law on the expiry of one month from the date of their publication (namely) :—

Preliminary.

1. In these Rules :—

- (1.) "The Act" means the Petroleum Act, 1881.
- (2.) "Petroleum declared dangerous" means petroleum which the master of a ship has declared under Rule 2 to be dangerous petroleum.
- (3.) "Certificated Petroleum" means petroleum in respect of which a certificate of such description as the Governor in Council, from time to time, by resolution permits to be recognized for the purposes of these Rules, has been obtained at the port of shipment declaring that the said petroleum is not dangerous petroleum.
- (4.) "Uncertificated Petroleum" means petroleum which is neither petroleum declared dangerous nor certificated petroleum.
- (5.) "Petroleum reported dangerous" and "Petroleum reported not dangerous" means petroleum which the Chemical Examiner has certified in a report under Rule 5 to be respectively dangerous or not dangerous.
- (6.) "The Chemical Analyser" means in Bombay the Chemical Analyser to Government, in Karachi the Civil Surgeon, and in Aden the Port Surgeon.
- (7.) "The Chief Customs Officer" means the Chief Executive

11. Officer of Sea Customs for any port to which these rules apply.
- (8.) Words and expressions defined in Sections 3 and 7 of the Act have the same meanings as are respectively assigned to them in those Sections.

Importation at Bombay, Karachi and Aden.

2. The master of every ship bound for Bombay, Karachi or Aden, carrying petroleum, shall deliver to the pilot before reaching the point herein below specified (namely) :—

At Bombay, the Sunk Rock Light-House.

At Karachi, the No. 2 Deep Water Point Moorings.

At Aden, such point as shall be fixed in this behalf by the Resident.

A written declaration under his signature stating—

- (a) What quantity of petroleum the ship is carrying.
- (b) Whether any, and if so what, part of it is dangerous petroleum.
- (c) Whether any, and if so what, part of it is certificated petroleum ; and
- (d) Whether any, and if so what, part of it is oil intended exclusively for lubricating or jute batching purposes, and having a flashing point above 150° Abel's test ;

if the master declares that any petroleum is certificated petroleum he shall deliver to the pilot, along with his declaration, the certificate relating to such petroleum.

3. A ship having on board only certificated petroleum not exceeding five hundred gallons in quantity, or oil declared by the Master to be of the description mentioned in clause (d) of Rule 2, or both, may be anchored at any anchorage in the port at which it is otherwise lawful for such ship to be anchored, and her cargo may be discharged in the ordinary manner : Provided

- (a) That such petroleum shall be landed subject to the provisions of Rules 12 to 15.
- (b) That the Chief Customs Officer shall be entitled at any time to obtain a sample of such certificated petroleum or oil for the purpose of having it tested.

4. A ship having on board.

- (a) Petroleum declared dangerous ; or certificated petroleum exceeding 500 gallons in quantity ; or
- (c) Uncertificated petroleum shall be anchored at such anchorage as the Conservator of the Port shall appoint in this behalf, and shall not leave such anchorage until such petroleum has been discharged.

5. When a ship is brought to anchor at the anchorage appointed under Rule 4, such Officer as the Chief Customs Officer authorizes in this behalf shall, as soon as may be, proceed on board, and obtain samples of every variety of petroleum on board other than petroleum declared dangerous.

The Master shall give to the said officer without charge, any one entire tin or case of every variety of petroleum on board not being petroleum declared dangerous, which the said officer requires, or, if the said officer deems that a smaller quantity will suffice, shall allow such

quantity as the said officer deems sufficient to be drawn from every tin or case indicated by the said officer for this purpose.

The said officer shall forthwith seal each tin case, or other receptacle containing the samples so obtained, and affix to each the name of the ship, the name of the consignee of the petroleum and such other particulars or distinguishing marks as he thinks fit, and forward them to the Chemical Analyser for report.

The Chemical Analyser after testing the said samples shall, without delay, forward a report under his signature certifying whether the petroleum comprised in each sample is, or is not, dangerous to the Chief Customs Officer who shall record the same in his office.

6. Except as is otherwise provided in Rules 7, 8 and 9, no petroleum shall be landed from any ship until the Chemical Analyser's report in respect thereof has been received in the office of the Chief Customs Officer, if such petroleum comes under clauses (a), (b) or (c) of Rule 4.

7. If the quantity of petroleum declared dangerous on board a ship does not exceed forty gallons, and there is no other petroleum on board, or the aggregate quantity of petroleum on board, including the petroleum declared dangerous, does not exceed forty gallons, the said petroleum may be forthwith landed.

If the quantity of petroleum declared dangerous exceeds 40 gallons, or if it does not exceed 40 gallons, but the aggregate quantity of petroleum on board exceeds that amount, the whole or any portion thereof may be at once landed if the whole amount of the petroleum on board is covered by an import license under Section 4 of the Act.

8. The Chief Customs Officer may allow the consignee of any certificated petroleum exceeding 500 gallons in quantity, to land the same in anticipation of the Chemical Analyser's report at any landing place duly appointed for this purpose under Rule 14 on the condition that such petroleum shall be stored in a public warehouse built according to any rules in force for the storage of petroleum, and set apart for the storage of certificated petroleum which has not been reported not dangerous.

The Chief Customs Officer may, before permitting such petroleum to be landed, take from the consignee such undertaking as he thinks fit with or without security, for the due observance of all rules relating to dangerous petroleum in respect of any portion of the petroleum which he allows to be so landed which may afterwards be reported dangerous.

9. As soon as the Chemical Analyser's report has been received in the office of the Chief Customs Officer, the petroleum to which the same relates shall be deemed to be dangerous or not dangerous in accordance with the said report; and any petroleum reported dangerous which has not been declared dangerous shall at once be subject to the provisions relating to dangerous petroleum.

10. Petroleum reported not dangerous may be landed forthwith.

Provided that the Chief Customs Officer may, in any case, determine what tins or cases or what quantity of each variety of petroleum on board any ship may be landed on the strength of the Chemical Analyser's report, and may direct such further samples to be taken from the rest and tested under Rule 5 as he considers necessary for the purpose of ascertaining the uniform character of each variety, and may further determine what tins or cases or what quantity of

petroleum shall be deemed to be reported dangerous or not dangerous¹¹ on each test.

11. If the petroleum reported dangerous, together with the petroleum declared dangerous if any exceeds 40 gallons in quantity, and the same has not been already landed under the second paragraph of Rule 7, no part of it shall be landed except on production of import license under Section 4 of the Act covering the whole amount thereof.

12. Applications for import licenses under the said Section of the Act shall be submitted in Bombay to the Commissioner of Police, in Aden to the Resident, and in Karachi to the Commissioner in Sind, who will, after inquiry, forward the same with their opinion to Government in the General Department.

If the application is granted, a license in the form prescribed in the schedule and signed by a Secretary to Government will be forwarded to the applicant through the officer to whom his application was submitted.

13. If the petroleum declared dangerous or reported dangerous on board of a ship, or both together, exceed in quantity 40 gallons, and no license for the importation thereof is produced under Section 4 of the Act, the said petroleum, or any portion thereof, may nevertheless be landed by any person who produces a license from Government under the said Section authorizing him to keep the said petroleum or the said portion thereof at any place for the purpose of being re-exported.

14. Petroleum shall not be discharged, landed or transhipped at any time between sunset and sunrise.

15. Smoking and the use of any fire or light on any boat which is being used for landing or transhipping petroleum are prohibited.

16. Petroleum shall be landed only at such landing-places as shall be prescribed by the Chief Customs Officer with the sanction of Government for Bombay, of the Commissioner in Sind for Karachi, and of the Resident for Aden.

17. Petroleum shall not be stacked on or near any landing-place, but shall be at once removed to its proper destination.

Importations at other ports.

18. Petroleum may only be imported from any port beyond the limits of British India at the ports of Bombay, Karachi and Aden.

19. Petroleum may be imported from any British Indian port at any port in the Presidency of Bombay.

Provided that if the amount thereof exceeds 40 gallons it may not be so imported at any port other than Bombay, Karachi, or Aden, unless it has been reported not dangerous at the port of shipment or certified to be not dangerous by any officer of the said port duly authorized to issue such certificates, nor without production of a certified copy of the Chemical Examiner's report, or of the certificate declaring the said petroleum to be not dangerous.

General Exceptions.

20. Nothing in these Rules applies to petroleum comprised in a ship's stores and manifested as such if the quantity thereof is not in the opinion of the Chief Customs Officer unreasonably large.

If in the opinion of the said officer the quantity of petroleum manifested as ship's stores is unreasonably large, the provisions of

these Rules shall be applicable to the excess over and above the quantity which he deems reasonable.

21. Nothing in these Rules affects any provision of the Act or of any Rule for the time being in force relating to the possession or transport of petroleum.

SCHEDULE.

Form of License for Import of dangerous Petroleum, to be granted under Section 4 of the Act.

No.

License is hereby given to _____ of _____ to import at the port of _____ cases (or tins, &c.) containing in all _____ gallons of dangerous petroleum subject to conditions specified on the reverse. The amount of petroleum in each case or tin is stated below :—

This license shall continue in force only till the day of _____ 188 .
Bombay Castle, dated the _____ of _____ 188 .

Secretary to Government.

These licenses is granted subject to the following conditions :—

1. The petroleum covered by this license shall not be discharged or landed except between sunrise and 10 A.M. or between 3 P.M. and sunset.
2. The petroleum shall be carried in covered boats.
3. No smoking, fire or light of any kind shall be permitted on the boat in which the said petroleum is carried.
4. The said petroleum shall be landed at _____ and at no other place.
5. Should the Commissioner of Police (or the Commissioner in Sind, or the Resident, *as the case may be,*) consider it necessary that the said petroleum be landed under a guard, the license holder shall before landing any part thereof pay the cost of such guard at such rate as shall be fixed by the Commissioner (or Resident).

The following Rules for regulating the granting of licenses to possess or transport petroleum in the Presidency of Bombay made by the Governor in Council in exercise of the power conferred by Section of the Petroleum Act, 1881, are published with the sanction of the Governor-General in Council, and, under Section 18 of the said Act, will have the force of law on the expiry of one month from the date of their publication (namely).

Preliminary.

1st. In these Rules * :

- (1.) "The Act" means the Petroleum Act 1881.

* NOTE.—These rules extends to the whole of the Presidency of Bombay, so far as regards dangerous petroleum. As regards petroleum which is not dangerous they are applicable only in those local areas to which Government may, from time to time, extend the provisions of Petroleum Act 1881 not relating to dangerous petroleum or the importation of petroleum.

- (2.) "City of Bombay" includes every place for the time being within the local limits of the ordinary original civil jurisdiction of the High Court of Judicature at Bombay.
- (3.) Words and expressions which are defined in the Act have the same meaning as in the Act.

Possession of Petroleum.

2. Licenses for keeping petroleum exceeding 500 gallons in quantity, or dangerous petroleum shall ordinarily be granted only when the premises intended to be used for the storage of such petroleum are separated by a clear open space of not less than 20 feet on every side from any other building and when they also fulfil the following conditions, viz. :—

- (a) in the city of Bombay when the building in which the petroleum is to be stored is constructed of masonry with terraced or iron roof, and with tiled or paved or earthen floors, and when the doorways and opening of the building are built up to a height of not less than two feet above the level of the road or street, or when the floor is sunk at least two feet below the level of the road or street, so that petroleum cannot flow out of the building in case of fire ;
- (b) outside the city of Bombay either the conditions specified in clause (a) or the following conditions, viz., when the building in which the petroleum is to be stored is built of brick or earth and no inflammable material has been used in the construction of any portion thereof except the doors ; and when the building is surrounded by a wall or earthen embankment not less than four feet high with a trench between such wall or embankment, and the building close to and completely surrounding the building of sufficient capacity to hold all the petroleum stored and to prevent its escape beyond the limits of the trench in case of fire.

Provided that Government or the officer who grants the license (as the case may be) may for special reasons (which, when the license is granted by an officer, shall be recorded by him in writing before he grants the license) dispense with any or all of the said conditions.

3. The licensing officer, or any police officer of or above the rank of Head Constable, may enter any premises in respect of which a license for the possession of petroleum has been granted for the purpose of inspecting the same, at any time between sunrise and sunset.

4. The licensing officer, or any police officer as aforesaid, may require any licensee to show him any of the vessels in which any of the petroleum in his possession is stored or contained to give him such assistance as he may require for examining the same, and to deliver to him a sample from any vessels which he indicates for this purpose on payment of the value of such sample.

The procedure prescribed in Section 11 of the Act shall be followed

in respect of the testing of any sample so obtained, the licensee being deemed for this purpose a dealer in petroleum.

Transport of Petroleum.

5. License for the transport shall only be granted if the petroleum to be transported is packed in airtight tins or other vessels, not easily broken or is contained in bottles securely stopped and carefully packed so as to avoid risk of breakage.

If the petroleum is to be conveyed in a cart, it shall only be so transported between sunrise and sunset.

6. It shall be the duty of all police officers to see that petroleum which is being transported under a license is conveyed only in the manner prescribed in the last preceding rule, and by such route as is specified in the license; any such officer may stop and inspect any petroleum in transit and, if necessary, require the person in charge of the same to comply with these rules or with any of the conditions of the transport license.

Grant of Licenses.

7. Applications under Section 4 of the Act for a license to keep or transport dangerous petroleum exceeding 40 gallons in quantity shall be submitted, in the city of Bombay, to the Commissioner of Police, in Aden, to the Resident, and elsewhere to the Commissioner of the Division, who will, after enquiry, forward the same with their opinion to Government in the General Department.

If the application is granted, the license, signed by a Secretary to Government, will be forwarded to the applicant through the officer to whom his application was submitted.

8. Applications for licenses to possess or transport petroleum not falling under Section 4 of the Act should be made to the officers who are herein below respectively authorized to grant the said licenses (namely):—

License for	If applied for in	May be granted by
(1) Keeping dangerous petroleum equal to or less than forty gallons in quantity by one person or on the same premises.	(1) the City of Bombay.	(1) the Municipal Commissioner.
(2) Keeping petroleum exceeding five hundred gallons in quantity by one person or on the same premises.	(2) Aden.	(2) the Resident.
(3) Transporting dangerous petroleum equal to or less than forty gallons in quantity.	(3) elsewhere.	(3) the Magistrate of the District or such other officer as Government by notification in the <i>Bombay Government Gazette</i> , from time to time, specially authorize in this behalf the Commissioner or Deputy Commissioner of Police.
(4) Transporting petroleum exceeding 500 gallons in quantity.	(1) the City of Bombay.	(2) the Resident.
	(2) Aden.	(3) the Magistrate of the District or such other officer as Government specially authorize in this behalf in the manner aforesaid.
	(3) elsewhere.	

9 Applications for licenses for keeping or transporting petroleum shall be in writing.

Applications for licenses for keeping petroleum shall specify :

- (a) the description and quantity of petroleum which the applicant desires to keep ;
- (b) the name and position of the premises in which it is proposed to keep the said petroleum, and whether the said premises fulfil the conditions required by Rule 2 ;
- (c) the purpose for which the applicant desires to keep the said petroleum ;
- (d) the amount of petroleum, if any, already licensed to be kept in the same premises.

Applications for licenses for transporting petroleum shall specify :

- (e) the description and quantity of petroleum to be transported ;
- (f) the places from and to which it is desired to transport the said petroleum ;
- (g) the route and means by which it is proposed to convey the same ; and
- (h) the kind of vessels in which the petroleum to be transported is contained.

10. In dealing with any application under Section 5 or Section 9 of the Act the licensing officer may, in his discretion, grant a license for the possession or transport of such quantity of petroleum as he thinks fit.

11. Every license for the possession of petroleum shall be in force for one year from the date of the grant thereof and every license for the transport of petroleum shall be in force for such period not exceeding three months from the date of the grant thereof as shall be fixed by Government or by the officer who grants the same, unless such license is revoked by competent authority before the expiry of such period.

12. Every application for the removal of a license for the possession of petroleum shall be made in the same manner as an application for an original license. Every such application shall be made not less than fifteen days before the date on which the original license expires.

Fees for Licenses.

13. The following fees shall be charged for licenses to keep or transport petroleum, whether original or renewed (namely) :—

- | | | |
|--|------------|-------|
| (1) License for keeping dangerous petroleum exceeding 40 gallons in quantity ; for every forty gallons or fraction of 40 gallons | ... .. | Rs. 5 |
| (2) License for the transport of do. do. for every 40 gallons or fraction of 40 | do. | " 4 |
| (3) License for the possession of dangerous petroleum not exceeding 40 gallons in quantity | ... .. | " 3 |
| (4) License for the transport of do. do. ... .. | ... .. | " 2 |
| (5) License for keeping petroleum. | | |
| (a) When the maximum quantity licensed does not exceed 2,000 gallons | ... .. | " 25 |

(b) When the maximum quantity licensed exceeds 2,000 gallons but does not exceed 10,000 gallons	Rs. 50
(c) When the maximum quantity licensed exceeds 10,000 gallons but does not exceed 20,000 gallons	" 100
(d) For every additional 10,000 gallons or fraction thereof	" 50
(6) License for the transport of petroleum :	
When the quantity does not exceed 10,000 gallons	" 1
When the quantity exceeds 10,000 gallons	" 5

Forms and Conditions of Licenses.

14. Licenses granted under these rules shall be in the forms and shall have inserted in them the conditions respectively prescribed in the schedule hereto annexed.

Revocation of Licenses.

15. Every license granted under these rules may at any time be revoked by Government or by the officer who granted it, or his successor in office, on its being established to the satisfaction of Government or of such officer that the licensee or any person in his employ has infringed any of its conditions or any provision or these rules or of the Act.

A.

Form of License to keep dangerous Petroleum, to be granted under Section 4 or Section 5 of the Act.

No.

Fee Rs.

License is hereby granted to _____
to keep in the premises described below _____ gallons of dangerous
petroleum subject to the conditions prescribed on the reverse.

This license shall continue in force for one year from the date hereof, and may be renewed on application being made for this purpose not less than fifteen days previous to the expiry of the said year.

Description of premises above referred to

(Sd.) Secretary to the Government of Bombay ;
 When the amount of { or Municipal Commissioner, Bombay ;
 Petroleum does not { or Resident, Aden ;
 exceed 40 gallons. { or Magistrate of the District.

This License is granted subject to the following conditions :—

- (1) No goods of a combustible nature shall be stored in the premises in respect of which this license is granted.
- (2) Every case or (tin, &c.) in which the petroleum is contained must bear an indelible mark or label as required by Section 6 of the Act.
- (3) No vessel containing petroleum shall be opened and no oil shall be drawn from any vessel within the building in which the petroleum is stored.
- (4) No smoking, light or fire in any form shall be permitted at any time within the said building.
- (5) If Government or the officer who grants this license requires

the holder of this license by notice in writing to execute any repairs which may in the opinion of Government or of such officer be necessary for the safety of the premises in respect of which this license is granted, the holder of this license shall execute the same within such period not being less than one week from the date of the receipt of the notice as may be fixed by the notice.

- (6) The license-holder shall not deliver any quantity of the petroleum covered by this license exceeding 3 gallons to any person who does not hold a license to possess the same under Section 4 or 5 of the Act. If he delivers any quantity thereof not exceeding three gallons to any person he shall observe the provisions of the proviso to Section 5 of the Act as to the vessels in which such petroleum must be contained.

B

Form of License for transport of dangerous Petroleum to be granted under Section 4 or Section 5 of the Act.

No.

Fee Rs.

License is hereby given to _____ of the Petroleum
of _____ under Section _____
Act 1881 to transport _____ cases (or tins, &c., as the case
may be) containing in all _____ gallons of dangerous petroleum
from _____ to _____ subject to the conditions
prescribed on the reverse and by the following route namely :

The amount of petroleum in each case (or tins, &c.,) is stated below.
This license shall continue in force only till the day of _____ 188 .

(Sd.) Secretary to Government of Bombay ;
When the amount of { or Commissioner or Deputy Commissioner
petroleum does { of Police, Bombay ;
not exceed 40 gal- { or Resident, Aden ;
lons. { or Magistrate of the District.

This license is granted subject to the following conditions :—

- (1) The petroleum shall be carried in covered ^{boats.} _{carts.}
- (2) Every case (or tin, &c.,) in which the petroleum is contained must bear an indelible mark or label as required by Section 6 of the Act.
- (3) No smoking, fire or light of any kind shall be permitted on the ^{boats} _{carts} in which the petroleum is carried.
- (4) The license holder shall not deliver any quantity of the petroleum covered by this license exceeding three gallons to any person who has not a license to possess the same under Section 4 or 5 of the Act. If he delivers any quantity thereof not exceeding three gallons to any person, he shall observe the provisions of the proviso to Section 5 of the Act as to the vessels in which such petroleum must be contained.
- (5) Should the Commissioner of Police or any District Magis.

trate,* through whose jurisdiction the petroleum covered by this license has to pass, consider it necessary to send a guard with the same, the license-holder shall, before conveying the said petroleum within the said jurisdiction, pay the cost of such guard at such rate as shall be fixed by the Commissioner or Magistrate.

* In Aden substitute the "Resident."

C.

*Forms of Liscense to keep Petroleum which is not dangerous
Petroleum, to be granted under Section 8 of the Act.*

No.

Fee Rs.

License is hereby given to
to keep in premises described below _____ gallons of petroleum,
which is not dangerous petroleum, subject to the conditions pre-
scribed on the reverse.

This License shall continue in force only till the _____ day
of _____ 188 .

Description of the premises above referred to.

(Sd.) Municipal Commissioner, Bombay ;
or Resident, Aden ;
or District Magistrate.

This License is granted subject to the following conditions :—

1. No goods of a combustible nature shall be stored in the premises in respect of which this license is granted.
2. No vessel containing petroleum shall be opened, and no oil shall be drawn from any vessel within the building in which the petroleum is stored.
3. No smoking, light or fire in any form shall be permitted at any time within such building.
4. If the licensing officer requires the holder of this license, by notice in writing, to execute any repairs, which may, in the opinion of such officer, be necessary for the safety of the premises in respect of which this license is granted, the holder of this license shall execute the same within such period, not being less than one week from the date of the receipt of the notice as may be fixed by the notice.

D:

*Form of License to transport Petroleum which is not dangerous
Petroleum, to be granted under Section 8 of the Act.*

Fee Rs.

License is hereby granted to _____
to transport _____ cases (or tins, &c.,) of petroleum which is

ary 1882, in its report forwarded to Government on the 2nd May of that year. The Chamber is still of opinion that a responsibility is thrown on the master of the vessel which belongs properly to the consignee or importer of the cargo ; but, if Government still declines to adopt this suggestion, the Chamber suggests that, with the view of avoiding detention, a right may be reserved to the agents or owners of cargo to lodge the necessary documents with the Custom House authorities in anticipation of the vessel's arrival.

RULE 17.—Under this rule it is laid down that petroleum shall not be stacked on or near any landing-place, but shall be at once removed to its proper destination.

The Chamber desires to remark that it is not possible that petroleum can be landed from the boat and taken at once to the warehouse. The cases must be counted, assorted and repaired, on the bunder ; and the Chamber suggests that the words in this Section, viz., “ but shall be at once removed to its proper destination,” be struck out, and the following substituted, viz., “ and shall be removed within twenty-four hours to its proper destination.”

RULE 19, PARA. 2.—The Chamber is of opinion that this clause will hamper the coasting trade. If shippers of small quantities are compelled in each case to go to the Chemical Analyser and obtain from him a report that the oil is not dangerous, it will be attended with great hardship to the trade, and it appears to the Chamber that this is quite unnecessary. Oil, under these rules, is supposed not to be imported until it is pronounced not to be dangerous. If once it is imported and taken into a licensed warehouse, this is a proof that the oil has already been reported upon and that it is not dangerous. The Chamber, therefore, suggests that it would be sufficient if the Custom House officers on the wharf wrote on the shipping documents “ passed from the licensed warehouse,” which, the Chamber thinks, would meet all the requirements of the case.

In conclusion, I am desired to append a copy of the letter, dated 7th February 1883, which the Chamber addressed to Government on the subject of Petroleum Legislation in India, and to express its hope that Government may, when the question of the accuracy of tests has been finally settled, see their way to give effect to the conditions named therein.
—I have, &c.,

J. GORDON, Secretary.

APPENDIX J.

RAILWAY RATES FOR THE CARRIAGE OF PETROLEUM.

A MEMORANDUM IN REFERENCE TO REDUCED RAILWAY FREIGHTS FOR PETROLEUM IN INDIA.

A railway management, in reaching a decision concerning a suggested reduction of freight rates upon any important commodity of transport, are naturally governed by the following considerations:—

- (a) Is the existing rate unduly excessive?
- (b) Is the commodity safe and convenient for transport?
- (c) Is there a relative preponderance or deficit in freight for the localities to which the said commodity is destined?
- (d) Would the proposed reduction of rate stimulate increased business to an extent imparting the principle of mutuality to the concession?

By way of comments on

(a) A very considerable proportion of the refined petroleum of commerce is manufactured in New York and vicinity, the crude product having been first transported by railways and pipe lines 500 to 700 miles from the producing localities; labour and the value of the oil lands and machinery being the leading elements of first cost. In New York the crude product is then refined amid all the accessories of valuable land, vast and expensive machinery, labour, chemicals, fuel, waste and all concomitants incidental to a great manufacturing business. It is then packed in tin and wood (and so perfectly that the average loss on cargoes to the distant Oriental ports is less than one per cent). It is then loaded on vessels and consigned to a voyage of four months and upwards and subjected to freight, insurance, and other charges incidental to ocean carriage, and has finally been delivered in Calcutta at as low a cost to the importer as Rs. 3-6 per case.

The distance from Calcutta to Lahore is about 1,300 miles. For purposes of rough calculation, a case containing two tins of refined petroleum weighs about a maund. At the risk of the owner, the rate of carriage for petroleum is one-half pie per maund per mile. 1,300 miles at $\frac{1}{2}$ pie per maund per mile is therefore about Rs. 3-6 per case. Aside, therefore, from the intermediate profits of commerce, the cost of petroleum at Lahore becomes about Rs. 6-12 per case, of which *one-half* is represented by the railway charges from Calcutta. All other considerations aside, do not these figures appear unduly burdensome on commerce and consumer?

(b) While the question as to whether any given product is desirable for transport must depend largely on opinion or prejudice to

determine, it seems pertinent to record the following concerning American petroleum :—

1st.—European and American Railways accept it in barrels, without reservation, although leakage is more probable and handling more difficult than when packed in tins and boxes as in India.

2nd.—At far greater expense than if in barrels, petroleum is packed in tins and boxes with special reference to tropical climates, easy stowage, and coolie handling.

3rd.—After long and careful investigation, the Indian Government imposed a higher standard of test than is exacted by other tropical countries.

4th.—Such trifling leakage as might be unavoidable, could not prove more damaging to railway freight carriages than to steamships, very few of which now decline to transport petroleum, while the large number of vessels loaded with petroleum leaving American shores every year are re-loaded with almost every variety of food and fabric.

5th.—Before properly packed petroleum can become ignited, the wooden box must first be in flames, and the fire prolonged to an extent that the oil within the tins becomes so extremely hot that its expansion forces open the tins and thus exposes the oil to the flame. The oil then fulfils its natural mission, and *burns*. Examples are, however, quite frequent of the box being partly or wholly consumed without igniting the oil. There are certainly many products that pass unquestioned that are far more susceptible to easy ignition than petroleum. Carriers in India should recognise that petroleum must be heated to about 120° before it will take fire, and then only in contact with flame or the electric spark, and the distinction should then be noted between *ignition* which *does* take place and *explosion* which *does not*.

(c) Only incidental reference is needed in this connection to the important fact that the preponderance of freight is largely from the interior to the seaport, and therefore added freight from seaport to interior is much desired and should be encouraged whenever practicable. Better more petroleum and fewer empty cars.

(d) While the extent of increased transport that will attend a lessened rate of carriage must of course be somewhat conjectural, the following observations seem pertinent :—

1st.—Experience has evidenced in all countries of the world that the cheapening of petroleum has not only increased the *number* of consumers, but the average quantity consumed by each. This has been notably the case in countries where the masses of the people have been very poor.

2nd.—The consumption of petroleum in India has been by far the largest at the seaports or in localities economically accessible therefrom.

3rd.—It is the unanimous opinion of merchants, both European and Native, both at the seaports and in the interior, that reduced rates of transportation would *materially* increase trade.

4th.—In the smaller Oriental countries like Java and Japan, where the interior is accessible and the transportation economic, the largest

consumption per capita has been reached. The following figures for 1881 are worthy of attention :—

Country.	Population.	Total Consumption Cases.	Per Capita.
Java.....	19,500,000	1,300,000	1 case to each 15
Japan.....	36,000,000	1,400,000	1 " " 26
India.....	240,000,000	1,000,000	1 " " 240
China.....	360,000,000	650,000	1 " " 554

It should be specially noted that where the per capita consumption is the most favorable the masses of the people are the poorest and almost exclusively agricultural, there being among the natives of Java no wealthy and influential commercial class as in India. Should Indian consumption attain the Java per capita there would be 12,000,000 cases instead of 1,000,000 annually consumed ; and the fact should also be noted that Java consumption is still increasing. The *present* ratio of consumption at the Indian seaports if extended to the interior would bring a most important increase of business to the railways. India has about one-fifth of the population of the world, while her consumption of petroleum was only about one-sixtieth of the world's consumption of 1881.

While the prediction might be unwarranted and the prophecy might prove irrational that the Indian consumption would ever tally per capita with that of Java, the figures are highly suggestive—almost *conclusive*—that under fostering transportation and legislative influences a most important increase is attainable.

Recommendations.

A.—That petroleum is entitled to, and should receive, *first* classification hereafter.

B.—That at the expiration of any given year, each shipper who can produce the customary receipts evidencing that he has shipped during the said year _____ thousand cases shall receive a rebate of _____ per cent and if _____ thousand cases a *further* rebate of _____ per cent.

This would prove a great incentive to the native merchants to increase their interior business to an extent necessary to secure the rebate, and if the business *were* so increased, the railway could well afford the payment of the rebate, and thus the principle of *mutuality* would be established.

Finally.—The probabilities of a satisfactory outcome to the railways seem sufficient to induce the management to give these recommendations at least a year's trial. Such a decision would appear judicious ; such an experiment could not prove disastrous.

WM. H. LIBBY,
(of New York City).

Calcutta, January 17th, 1883.

BOMBAY CHAMBER OF COMMERCE, 3rd February, 1883.

H. CONDER, Esq., General Traffic Manager, G. I. P. Railway, Bombay.

DEAR SIR,—The Committee of the Chamber desire me to address you on the subject of the rates charged by the G. I. P. Railway Company for the carriage of kerosine oil. These rates are much higher than those charged by the East Indian Railway, as the enclosed comparative statement of the relative rates for kerosine and piece-goods per maund shows; and they appear to the Committee to be so high that the trade of this port in petroleum is hampered by the great difference between railway rates at Bombay and Calcutta. A case of kerosine oil weighs, roughly, 1 maund. The Committee, moreover, are informed that the Bengal Chamber is bringing the subject before the East Indian Railway with the view of obtaining a further reduction in their rates.

The petroleum trade is an industry of comparatively recent introduction into India, yet, at this port and at Calcutta, it has assumed very large proportions during the last few years, and, with adequate encouragement, there appears to be no limit to its consumption, as the natives are gradually getting accustomed to it. In the three years ending 31st March last, the imports of kerosine oil into Calcutta and Bombay were as follow :—

	Calcutta. Gallons.	Bombay. Gallons.
1879-80	2,336,571	2,821,128
1880-81	3,861,851	3,953,746
1881-82	4,845,912	2,640,267

The falling off in the imports into Bombay in 1881-82 was owing to the low prices ruling; but in the nine months ending 31st December last the imports have again risen to 3,826,058 gallons.

I am requested also to draw your attention to the fact that the average consumption per head in India is very small compared with other countries. In Java, the imports in 1882 were 2,351,392 cases, being an increase of upwards of one million cases on the imports of the previous year, and giving a consumption of about one case to eight people.

It has been represented to the Committee that owing to the high cost of carriage to the interior, there must be many places in India, where it is cheaper to burn the products of their oilseeds than imported kerosine; and a reduction in carriage of petroleum would result both ways to the advantage of the railways and trade in general, tending to increase the volume both of kerosine carried inland and of oilseeds carried to the seaports.

The Committee desire me to enclose a printed Memorandum in reference to reduced railway freights for petroleum in India, dated Calcutta, 17th January, 1883, which has been forwarded to the Chamber; and they trust that this important subject will receive your early and favourable attention, the more so as they learn that the Railway Company complains that it has so little traffic to carry from Bombay.—I remain, &c.,

J. GORDON, Secretary.

BOMBAY CHAMBER OF COMMERCE, *8th February, 1883.*

T. W. WOOD, Esq., Agent B. B. and C. I. Railway.

DEAR SIR,—I am desired by the Committee of the Chamber to forward to you a copy of the letter, with its accompaniments, which they have addressed to the General Traffic Manager of the G. I. P. Railway on the subject of the rates charged by that Company for the carriage of kerosine oil.

The Committee desire me to ask the favour of your early attention to this important subject, and to express their hope that you will see your way to a reduction being made in the rates charged for the carriage of that article by your Company.

I also enclose for your information a printed copy of the Memorandum in reference to reduced railway freights for petroleum in India, dated Calcutta, 17th January, 1883, which has been forwarded to the Chamber.—I remain, &c.,

J. GORDON, Secretary.

No. 6153.

GREAT INDIAN PENINSULA RAILWAY COMPANY,
GENERAL TRAFFIC MANAGER'S OFFICE,
BOMBAY, *12th April, 1883.*

The SECRETARY CHAMBER OF COMMERCE, Bombay.

DEAR SIR,—I beg to acknowledge receipt of your letter of the 3rd February on the subject of the rates charged by the G. I. P. Railway Company for the carriage of kerosine oil as compared with the charge made by the East Indian Railway for this traffic.

2. The petroleum trade, as you remark, is an industry of comparatively recent introduction into India, and at Bombay it has assumed very large proportions. I am also glad to say that the export of the oil to the interior by this railway is steadily increasing, which, I think, goes to show that the freight charged for conveyance is not so high as to prevent a steady development of the traffic gradually, though surely, from year to year, and in proof of this I may say that from 1877, when the commodity was first despatched in large quantities by rail up to the end of 1882, the traffic has nearly doubled in quantity and is still increasing. I think you will agree with me that this is very satisfactory and encouraging.

3. I am aware that the consumption of kerosine oil is rapidly expanding throughout the country, and that it is in use amongst the people in their villages for a long distance on either side of the railway in preference to native manufactured oils, as it is considerably cheaper in addition to its other advantages. No doubt it is therefore desirable to encourage the traffic to penetrate into the interior as far as possible, and with that view we have fixed the

rate of carriage by rail as low as we can consistently with the risk incurred.

4. Kerosine oil requires special care in conveyance, and is classed under the head of explosives. It has to be placed in vans quite apart from all other goods, and in consequence we cannot at all times receive full wagons, and therefore the carriage of the traffic is more expensive than grain, piece-goods, and general goods.

5. With every desire to foster the trade in kerosine, I regret I cannot at present see my way to recommend a reduction in our rate, which, I think, is not excessive, considering the risks we incur in carrying the commodity.

I regret that so much delay has occurred in replying to your communication, but in consequence of Mr. Conder's departure to England on leave the matter was overlooked for some time.—Yours faithfully,

ED. W. KEILY,
Acting General Traffic Manager.

No. 2572 OF 1883.

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY,
AGENT'S OFFICE, BOMBAY, 23rd April, 1883.

To JOHN GORDON, Esq., Secretary Chamber of Commerce, Bombay.

DEAR SIR,—I have been in communication with the Manager of the Rajputana-Malwa Railway and with the Traffic Manager of this Company with reference to the subject of the carriage of kerosine oil, referred to in your letter to me, dated 8th February last, and I have now the pleasure to inform you that, so soon as necessary formal notices can be given, kerosine oil, flashing at or above 73°, Abel's test, will be forwarded from Bombay to other stations on this railway, and to stations on the Rajputana-Malwa Railway, via Sabarmati, at the following reduced class-rates on both lines, viz. :—

- (a) When carried at owner's risk 1st class, instead of 2nd class as now.
- (b) When carried at railway risk 2nd class, instead of 3rd class as now.

2. Present special rates, for the carriage of this oil from Bombay to Broach and from Bombay to Surat by railway, will remain in force, as will also our present charges for kerosine oil booked from any other station on our line than Bombay. Moreover, the terms on which kerosine oil flashing below 73°, Abel's test, is now carried, will not be changed.

3. The reductions of rate, now intimated, will apply, so far as the Baroda Railway and the Rajputana-Malwa Railway are concerned, equally to kerosine oil booked through from Bombay to stations beyond the Rajputana-Malwa Railway on connected lines,—I am, &c.,

T. W. WOOD, Agent.

BOMBAY CHAMBER OF COMMERCE, 16th June, 1883.

To the GENERAL TRAFFIC MANAGER, G. I. P. Railway Company, Bombay.

DEAR SIR,—I am directed by the Committee of the Chamber of Commerce to acknowledge the receipt of your letter No. 6153, dated 12th April last, on the subject of the rates charged by the G. I. P. Railway Company for the carriage of kerosine oil.

You remark that from 1877, when the commodity was first despatched in large quantities by rail, up to the end of 1882, the traffic has nearly doubled and is still increasing, and you think that the Chamber will agree with you that this is very satisfactory and encouraging. The Committee, however, take a very different view of this result. The imports of kerosine oil into Bombay in 1877 amounted to 176,780 gallons only, while in 1882 they rose to 3,826,058 gallons, or more than twenty-one times the quantity imported in 1877. Nothing, the Committee think, could prove more conclusively, as will be pointed out presently, that the railway rate is much higher than the article can bear. The industry is of recent, but of most rapid, growth; it affects the poorer classes chiefly; and to use your own words the oil is in use amongst the people in their villages for a long distance on either side of the railway in preference to manufactured oils, as it is considerably cheaper. If greater facilities had been given by the Railway Company for the transportation of the oil into the villages, the Committee cannot doubt but that the traffic on your line, instead of only having nearly doubled between the years 1877 and 1882, during which the import into Bombay increased so enormously, would have shown results corresponding in some proportionate degree with the great increase in the import trade.

The Railway Company, it is said, have fixed the rate as low as they can consistently with the risk incurred, and, as kerosine oil requires special care in conveyance, it is classed under the head of explosives. It is now well known that kerosine oil which flashes at or above 73°—the Government standard of test—cannot in any sense of the term be considered an explosive, and there does not therefore appear to be any good reason why the cost of the carriage of this particular article should be so much in excess of the charge on goods generally.

On the 8th February last, the Committee also wrote to the Agent of the B. B. & C. I. Railway Company, forwarding a copy of their letter to you of the 7th idem, and requesting that a reduction might be made in the rates charged by that Company for the carriage of kerosine oil. The rates charged by them and by the Rajputana-Malwa Railway were reduced as follows :—

- (a) When carried at owner's risk 1st class, instead of 2nd class as previously.
- (b) When carried at Railway risk 2nd class, instead of 3rd class as previously.

I enclose a copy of the Agent's letter for your information.

The Committee trust that you will take these circumstances into your early consideration, and that you will, on reconsideration, kindly recommend that the rate for the carriage of kerosine oil on the

G. I. P. Railway be reduced, the more so as the Company may consider it of some importance to encourage their inland traffic.—I remain, &c.,

J. GORDON, Secretary.

No. $\frac{R}{12137}$

GREAT INDIAN PENINSULA RAILWAY COMPANY,
GENERAL TRAFFIC MANAGER'S OFFICE.
BOMBAY, 12th July, 1883.

J. GORDON, Esq., Secretary Chamber of Commerce, Bombay.

DEAR SIR,—I have to acknowledge the receipt of your letter, dated the 16th ultimo, as to the rates for the conveyance of kerosine oil over this railway, and in reply beg to say that I have submitted all the correspondence on this subject to the Agent of this railway for consideration and decision.—Yours faithfully,

ED. W. KEILY,
Acting General Traffic Manager.

No. 10191.

GREAT INDIAN PENINSULA RAILWAY COMPANY,
POONA, 28th September, 1883.

JOHN GORDON, Esq., Secretary Chamber of Commerce, Bombay.

DEAR SIR,—I have had under consideration with Mr. Keily your correspondence with him regarding the present rate for kerosine oil, and have now the pleasure to inform you that, from the 1st November next, kerosine oil flashing at or above 73°, Abel's test, will be forwarded from Bombay to all stations on this railway or to other lines in connection when carried at owner's risk at first instead of as formerly at second class rate.

When carried at Company's risk at second instead of third class rates.

No alteration will be made in the charges for kerosine oil flashing below 73°, or for carriage between other stations.—I am, &c.,

G. A. BARNETT, Agent.

APPENDIX K.

INCREASED DOCK ACCOMMODATION.

No. 2188.

BOMBAY PORT TRUST, SECRETARY'S OFFICE,
ELPHINSTONE CIRCLE, BOMBAY, 20th July, 1883.

To the SECRETARY CHAMBER of COMMERCE.

SIR,—I am directed to forward herewith Trustees' Resolution No. 304, dated 12th July, which contains a description of the new dock, which, the Trustees think, should be built. Spare copies of the Resolution are likewise forwarded for distribution to members of Committee. I also forward six litho. plans of the proposed dock and two plans showing in addition the extension of channel that will be required.

The Trustees will be obliged if you will obtain and furnish them with the opinion of the Chamber on the proposed extension.

To the information contained in the plan and Resolution of the Trustees, it appears only necessary to add that the three berths at end of the jetties, shown on the plan to be 223' long, may, in the opinion of the Trustees, be used by much longer vessels, inasmuch as the stem and stern of a vessel may extend beyond either corner of the jetty, say 40 feet, being the width of the vessel occupying the berth at either side of the jetty.—I have, &c.,

G. MANSON, Secretary.

No. 304.

BOMBAY PORT TRUST, SECRETARY'S OFFICE,
ELPHINSTONE CIRCLE, BOMBAY, 12th July, 1883.

Excerpt from the Proceedings of a Meeting of the Trustees of the Port of Bombay, held on the 12th instant.

Submitted Resolution by the Dock Extension Committee, dated 27th June, recommending the Trustees to adopt a scheme for a new dock to give quay side berths to 19 vessels: the dock to absorb the Musjid and Nicol Bunders and Basins, to have 3 jetties, 400 feet long and 223 feet broad, running from west to east; the bays between the jetties to be 145' wide, the dock to have a separate entrance; the level of the sill of the entrance and floor of the dock to be two feet lower than those of the Prince's Dock, or 56 and 53 on

T. H. D. respectively ; the channel of approach to be worked to the same depth as the channel to Prince's Dock, the question of deepening it to be left for after consideration ; the connecting channel between Prince's Dock and the proposed extension to have some provision for shutting off the water from both sides ; provision for sheds and cranes to be made in the same proportion as in the Prince's Dock ; estimated cost, roughly, Rs. 84,86,561, including interest at 4 per cent. per annum during construction.

The Resolution and copy of plan having been sent to each Trustee, the former was not read.

Read letter from the Resident Engineer, dated 11th instant, regarding the expense and means of deepening the channel of approach to the proposed dock.

RESOLUTION.—The Trustees approve of the general plan of dock extension proposed by the Committee. It should be sent to the Chamber of Commerce for consideration, and should the Chamber agree with the Trustees that it is the scheme which should be adopted, then it should be sent on to Government for approval, and the other steps recommended by the Committee should be taken.

In the mean time the Resident Engineer should go on with the preparation of the complete plans and estimates.

[True Excerpt]

G. MANSON, Secretary.

BOMBAY, 15th August, 1883.

THE SECRETARY of the BOMBAY PORT TRUST.

SIR,—I am directed by the Committee of the Chamber of Commerce to acknowledge the receipt of your letter No. 2188, dated the 20th July 1883, forwarding the Trustees' Resolution No. 304, of the 12th idem, containing a description of the new dock which, the Trustees think, should be built ; also litho. plans (1) showing the proposed dock, and (2) showing in addition the extension of channel that will be required. These documents were printed and circulated to the members of the Chamber, and a Special General Meeting of the Chamber was held on Friday, the 10th instant, to consider the scheme of dock extension proposed by the Trustees. At this Meeting the following Resolution was carried unanimously :—

“ That the Chamber approves of the dock extension scheme recommended to the Port Trustees for adoption by the Dock Extension Committee, and approved of by them at a meeting held on the 12th July. The Chamber observes from the plans that it is expected the whole scheme will take five years to complete ; and as increased accommodation is now very urgently required, it trusts that the work will be begun as soon as possible, and that the dock will be finished without any avoidable delay.”

In forwarding this Resolution to you, the Chamber desired that the attention of the Trustees should be called to the Carnac Bunder

nuisance which, besides being injurious to health, is now, and always has been, a draw-back and inconvenience in the transaction of business in the locality; and that they should be asked to do all in their power to have the nuisance removed to some other locality where it could do little or no injury.

The Chamber further desired that owing to the great urgency which now exists for additional dock accommodation, the Trustees will specially urge upon Government the desirability of sanctioning the scheme as soon as possible, in order that the work may be proceeded with at the earliest practicable date.

The Committee desire me to hand you herewith 30 printed copies of the proceedings of the Special General Meeting of the Chamber, at which the subject was discussed.—I have, &c.,

J. GORDON, Secretary.

BOMBAY PORT TRUST, SECRETARY'S OFFICE,
ELPHINSTONE CIRCLE, BOMBAY, 23rd August, 1883.

Excerpt from the Proceedings of a Meeting of the Trustees of the Port of Bombay, held on the 23rd instant.

Read letter from the Secretary to the Chamber of Commerce, dated 15th August, communicating the following Resolution passed at a General Meeting of the Chamber:—"That the Chamber approves of the dock extension scheme recommended by the Port Trustees for adoption by the Dock Extension Committee, and approved of by them at a meeting held on 12th July. The Chamber observes from the plans that it is expected the whole scheme will take five years to complete; and as increased accommodation is now very urgently required, it trusts that the work will be begun as soon as possible, and that the dock will be finished without any avoidable delay."

The Chamber further calls upon the Trustees to do all in their power to have the Carnac Bunder nuisance removed to some other locality where it could do little or no injury. The Chamber also asks that the Trustees will specially urge upon Government the desirability of sanctioning the scheme as soon as possible in order that the work may be proceeded with at the earliest practicable date.

Submitted letter to the Resident Engineer, dated 20th August, requesting him to proceed with the preparation of such further and detailed plans and estimates as are necessary to enable the dock works to be put in the hand as soon as possible.

Submitted also letter addressed to Government, dated 23rd August, forwarding preliminary plans and estimates and asking Government to intimate whether they have any objections or suggestions to make with regard to the design of the dock.

RESOLUTION 369.—The question relating to the Carnac Bunder nuisance being one which it falls to the Municipality rather than the Port Trust to deal with, a copy of the para. in the Chamber's letter referring to it should be forwarded to the Municipal Commissioner

with a strong expression of opinion on the part of the Trustees that the nuisance complained of should be got rid of at the earliest possible date.

The question of obtaining funds for the dock extension should be referred to the Finance Committee for consideration.

[True Excerpt]

G. MANSON, Secretary.

No. 2669.

BOMBAY PORT TRUST, SECRETARY'S OFFICE,
ELPHINSTONE CIRCLE, BOMBAY, 1st September, 1883.

To the SECRETARY CHAMBER OF COMMERCE, Bombay.

SIR,—I am directed to forward, for the information of the Chamber, copy of Trustees' Resolution No. 380, dated 30th August, which shows the manner in which it is proposed to provide for the trade which will be displaced by the dock extension works.—I have, &c.,

G. MANSON, Secretary.

No. 380.

BOMBAY PORT TRUST, SECRETARY'S OFFICE,
ELPHINSTONE CIRCLE, BOMBAY, 30th August, 1883.

Excerpt from the Proceedings of a Meeting of the Trustees of the Port of Bombay, held on the 30th instant.

Submitted the following report on the redistribution of traffic about to be displaced by the dock extension works.

"13th August 1883.—On this day the Chairman, accompanied by A. C. Trevor, Esq., C.S., Collector of Customs, and by the Secretary and Traffic Manager, inspected the foreshore from Jamsetjee to Powder Works Bunder in order to decide upon a scheme for the redistribution of traffic that will be displaced by the dock extension to be put before the Trustees.

"The quay space of the Nicol and Musjid Bunders, which will be shut up, measures about 6000' lineal feet.

"The Traffic Manager stated that the pressure of traffic at Musjid Bunder had been much relieved by sand, chunam, bricks and tiles having been sent to the Powder Works Bunder.

"Seeing that the Customs Bunder is now almost deserted, the Traffic Manager considered that the British India steamers' cargo, and the sugar imports, might be sent there when the Nicol Bunder is closed with a minimum of inconvenience. This was approved of. The wharf space now occupied by the trade in question may be taken at 900'.

"The Traffic Manager expressed the opinion that the import and export grain trade by country craft from and to coast ports, which at

present occupies about 1,200 feet of wharf space, the Calcutta rice trade which occupies about the same, and the Malabar Coast trade, which occupies about 600 feet of quay space, should all be provided with basin accommodation.

"In order to do this it was proposed that the Mody Bunder should be completed to the line of the Elphinstone frontage, that the import and storage of coal and firewood at that Bunder should be stopped, that the east end of Carnac Bunder hitherto given up to imports should be given up to the export trade now provided for in Carnac Basin, and that an equal length of wall within the basin should be appropriated to the Musjid and Nicol Basin traffic. In this manner a length of basin frontage measuring (S. 1600'+W. 300'+N. 1100'=) 3000 feet will be rendered available for the displaced Nicol and Musjid Bunder traffic.

"The whole length of Mody Bay Reclamation frontage, from Mody Bunder on the north to the small basin at the end of Carwar Street on the south might, it was considered, be faced by a dry stone wall, made nearly upright, and cemented on the upper 2 courses only, as has been done with the Reclamation wall near the Mint. The length is about 3,500', but as about 750' is already occupied by the grass boats, there would thus only be a practical addition of 2750 lineal feet, and this might suffer further diminution if it were determined to deposit at Mody Bay the surplus material excavated from the new dock. If this work be carried out, there is no doubt that, in addition to providing for a portion of the displaced traffic, it will lead to the profitable occupation of much land on Mody Bay Estate now lying waste.

"In addition to the interior of Carnac Basin and the Mody Bay frontage, there would be available as a quay the outer end of Mody Bunder measuring 400' and the south side of the Bunder measuring about 1,100'. At the former the ferry boats could land their passengers even more conveniently than they can now at the Carnac Bunder.

"The coal hitherto stored on Mody Bunder might be left to select the most convenient point of import at the existing Bunders between Jamsetjee Bunder and Frere Reclamation, which are open to coal traffic. There is a considerable area of land available for coal storage at Jamsetjee Bunder, at Apollo Reclamation, at Clerk Bunder, and at Mazagon and Frere Reclamations, and to such importers as might prefer the neighbourhood of Mody Bunder the proposed new wharf along the Reclamation frontage would doubtless form a convenient landing place.

"The firewood trade, which has for so long been accommodated in the neighbourhood of Carnac Bunder, would merely have to move to the adjoining reclamation, and as the import trade is not carried on in the monsoon, there would be little hardship in using an open bunder.

"If the Carnac Basin should prove to be too small for the traffic proposed to be sent there as above described, then the Malet Bunder might be closed for coal, and made over to trade brought by native craft from customs ports, but experience should be gained before taking this step.

"The extension of Mody Bunder and facing Mody Bay Reclamation with a dry stone wall, if agreed upon, should be carried out in the most

expeditious manner possible, as until Nicol and Musjid Bunder trade is provided for elsewhere, it is obvious that the dock extension works cannot be begun."

Read minutes of Trustees to whom the report had been circulated.

RESOLUTION 380.—The arrangements proposed in the report are approved and should be acted upon.

A copy of the report should be furnished to the Chamber of Commerce for information.

[True Excerpt]

G. MANSON, Secretary.

No. 69 C. W.—389 of 1883.

PUBLIC WORKS DEPARTMENT,
BOMBAY CASTLE, 15th September, 1883.

Memorandum from the Marine Department, No. 114 P. T., dated 27th August 1883.

Transfers letter No. 2559, dated 23rd August 1883, and accompaniments, from the Secretary, Bombay Port Trust, for any remarks this Department may have to offer, with regard to the design of the proposed West Dock Extension on the Elphinstone Estate, Bombay.

RESOLUTION.—The proposal of the Trustee of the Port, approved by the Chamber of Commerce, for the extension of the Wet Dock on the Elphinstone Estate, by an additional dock taking up the Musjid and Nicol Basins, appears to be very suitable, and may be approved, in view to detail plans and estimates being prepared and submitted.

2. Government approve of the new dock being two feet lower than the Prince's Dock, but consider that the deepening of the approach should be carried out at the same time.

3. By this arrangement, the native coasting trade will be diverted to the other Bunders and Basins in the Harbour, and the Trustees should be asked to report whether they intend to adopt measures for improving the accommodation in this respect.

L. M. VALLADARES, for Colonel, R.E.,
Under-Secretary to Government.

No. 3007.

BOMBAY PORT TRUST, SECRETARY'S OFFICE,
ELPHINSTONE CIRCLE, BOMBAY, 3rd October, 1883.

To the SECRETARY CHAMBER of COMMERCE, Bombay.

SIR,—I am directed to communicate to you, for the information of the members of the Chamber, that it is now found that the extension of Mody Bunder cannot be completed before the time when it will be

necessary to remove the Musjid and Nicol Basin traffic from its present habitat.

Even if the Mody Bunder could have been completed, a doubt existed as to the possibility of accommodating in Carnac Basin the whole of the trade, which would require sheltered accommodation, and, seeing that the Mody Bunder extension will not be completed in time the doubt is now turned into a certainty that the trade cannot be thus accommodated. The alternative mentioned in Trustees' Resolution already communicated to you of making use of Malet Bunder for a portion of the ousted trade will, therefore, have to be adopted. When the transfer of trade is made, the Malet Bunder will have to cease to be used for the storage of coal, as coal and the grain trade conveyed by country boats which it is proposed to send there cannot be handled close to each other. The coal will, therefore, have to be sent to one of the other existing coal bunders or else to Mody Bay Reclamation, which, when the new wall along its eastern frontage is completed, will probably be found to be a more convenient and accessible place of stowage,—I have, &c.,

G. MANSON, Secretary.

APPENDIX L.

DRY DOCK ACCOMMODATION IN THE PORT.

No. 426 OF 1883.

MARINE DEPARTMENT,
BOMBAY CASTLE, 12th September, 1883.

From the SECRETARY to GOVERNMENT to the SECRETARY, BOMBAY
CHAMBER OF COMMERCE.

SIR,—Referring to your letter, dated 4th instant, I have the honour to forward herewith copies of the report of the Committee appointed to consider the question of dry dock accommodation for the larger classes of Her Majesty's ships-of-war, and of the Government Resolution thereon, No 263, dated 20th June last.—I have, &c.,

M. W. WILLOUGHBY, Colonel,
Secretary to Government.

REPORT OF THE COMMITTEE'S PROCEEDINGS.

Having regard to the evidence and statements embodied in the proceedings, the Committee are enabled to arrive at the following conclusions :—

2. The Committee do not recommend or advocate that the Hydraulic Lift at Hog Island should be made suitable for docking the larger classes of Her Majesty's ships-of-war, and they do not think it would be desirable or economical to shift the Hydraulic Lift Dock from Hog Island to the Bombay Foreshore.

3. The cost of removal may be taken at about 10 lacs, a sum, that the Committee think could be much more advantageously spent in constructing a graving dock, which is considered more suitable for docking Her Majesty's ships-of-war of all classes.

4. The Committee are of opinion that the Lift should remain at Hog Island as long as the Government contemplate a scheme for establishing a dockyard there.

5. On the questions (c) whether the Lift at Hog Island should be put into thorough repair, and (d), or abandoned altogether, &c., the Committee are equally divided in their opinions.

6. The Members marginally noted, concurring with the Director of Indian Marine, would recommend that the Lift should first be placed in working order, and that the other expenditure be taken in hand as there are

Lieut.-Col. Merriman.
Mr. Ormiston.
Mr. Campbell.

signs of a demand for the use of it.

7. They would, however, prefer to take the probable annual earnings at the reduced estimate of Rs. 16,500 instead of Rs. 27,000.

8. They cannot recommend Government to abandon this work after spending about 32 lacs of rupees, and after giving it so little chance of success.

9. They consider that, irrespective of the demand for dock accommodation, owing to the vast increase of tonnage of the Mercantile Marine in this port, the Lift would be a very valuable adjunct to the present Dockyard in emergencies and in the event of war, and that it should be maintained in working order at all times, available for the use of troopships and other large merchant vessels in commission, as armed cruisers, or transports.

10. On the other hand, the members named in the margin cannot recommend the Government to spend any more money on the Hydraulic Lift, as even if it was repaired, it would still be unsuitable for Her Majesty's ships-of-war, and it is doubtful whether merchant ships would use the Lift—owing to the great inconvenience, loss of time and expense involved—owing to its distance from Bombay.

Hon'ble W. M. Macaulay.
Mr. Forrest.
Captain Morland.

11. They remark that Indian Marine vessels have already the use of five graving docks with workshops, and every facility in the Government Dockyard in Bombay, which should be sufficient for their requirements, and therefore they do not think it appears desirable to repair the Lift for the use of the Indian Marine.

12. They also are of opinion that unless a Naval Dockyard with workshops and other appliances is to be established at Hog Island, it would be better to suffer the first loss and sell the Lift for what it will fetch, rather than spend any more money upon it.

13. The Committee in recording their opinions regret, therefore, they are unable to advise on these points (c) and (d); they would, however, remark that Government must expect to incur some loss in connection with the Hydraulic Lift Dock, as it is in evidence that the Port Trustees of Bombay could not hope to derive a revenue from it, when offered to them in 1881, and it is extremely doubtful now whether a private company could be found to work it.

14. Taking into consideration all the suggestions for sites for a large dock, namely, at Elephanta and Butcher's Island, Hog Island, and the Prince's Dock, the Committee are of opinion that the wishes of the Admiralty should be carried out by constructing a dry dock in Her Majesty's Dockyard at Bombay, on Captain Trevor's plans of 1867—(subject to modification), and so favourably reported upon by the Director of Works at the Admiralty.

15. The Committee have recorded their opinion that a graving dock open to the public should be available in the Port of Bombay. There is the probability of the Port Trustees constructing such a one in their proposed dock extensions.

16. The Committee, however, consider that as Bombay has now become such an important Naval Station, owing to so many of Her Majesty's ships, &c., frequenting the Port, the Admiralty should possess a large graving dock adjacent to their Dockyard establish-

ment, entirely at their own disposal, and independent of a dry dock shared with the Port Trustees or any other company of Mercantile Marine.

W. MERRIMAN,
Bt. Lieut.-Colonel, R.E. (President).
G. E. ORMISTON, M. Inst. C.E.
W. M. MACAULAY.
L. R. W. FORREST.
R. S. CAMPBELL.
HENRY MORLAND, Assoc. Inst. C.E.

Bombay, 12th May, 1883.

No. 263

MARINE DEPARTMENT,

BOMBAY CASTLE, 20th June, 1883.

Letter from the President, Dock Committee, No. 974, dated 24th May 1883.

Submits proceedings and report of the Committee appointed under Government Resolution No. 529, dated 13th November 1882, to consider the dry-dock accommodation at Bombay.

RESOLUTION.—The report should be forward to the Government of India.

2. It should be stated that His Excellency the Governor in Council regrets that the Committee have not arrived at an unanimous report on the question whether the Hydraulic Lift at Hog Island should be put into thorough repair or abandoned altogether, but the cases for and against the continuance and improvement of the Lift are fairly stated in explanation of the divergent views. Having regard to the fact that additional dry-dock accommodation is at all times required, that the construction of a new masonry dock would occupy a considerable time, that the trade will probably assume still larger proportions, and that the steamer companies are anxious for accommodation for painting and other repairs,—finally that as this Lift, upon which Government have expended a very large sum, (1) is at present almost useless, (2) would only be rendered useful by any private firm if transferred at a sacrifice of nearly the whole of its present capital cost, and (3), if repaired, would at all times constitute a valuable addition to the dock accommodation of the port with special advantages in time of war,—it would, in the opinion of His Excellency in Council, be worth while to execute the repairs estimated to cost Rs. 43,500 in the report of Mr. Deadman, Constructor of the Dockyard, attached to the letter of the Director of the Indian Marine, No. 990, dated 25th July 1882, and better still to undertake the further outlay recommended in the same report (or Rs. 1,20,000 in all) to render the Lift really efficient, with the estimated annual charges for maintenance (Rs. 15,000).

3. The thanks of Government should be conveyed to the President and members of the Committee for the services rendered by them.

M. W. WILLOUGHBY, Colonel,
Secretary to Government.

BOMBAY CHAMBER OF COMMERCE, *28th September*, 1883.

To the SECRETARY to GOVERNMENT, Marine Department, Bombay.

SIR,—I am directed by the Committee of the Chamber of Commerce to convey to you their thanks for your letter No. 426, of the 12th instant, forwarding copies of the report of the Committee appointed to consider the question of dry-dock accommodation for the larger classes of Her Majesty's ships-of-war, and of the Government Resolution thereon, No. 263, dated 20th June last.

The Committee desire me respectfully to suggest that the work of putting the Hydraulic Lift at Hog Island into thorough repair, which His Excellency the Governor in Council has approved of, should be proceeded with as soon as practicable.—I have, &c.,

J. GORDON, Secretary.

APPENDIX M.

WADWAN STATION COTTON MARKET.

No. 1612 OF 1882-83.

WADWAN CIVIL STATION, *23rd January, 1883.*

From Major E. V. STACE, Assistant Political Agent, Jhalawad Prant,
to the SECRETARY CHAMBER OF COMMERCE, Bombay.

SIR,—I have some reason to believe that you have received erroneous information lately regarding the existence of "transit duties" at this Civil Station on cotton exported to Bombay and elsewhere.

If you at any time require any information regarding this or other matters I shall be happy to supply it, and you will have a guarantee that it is correct.

I may mention that no transit due of any sort is levied on cotton here.—I have, &c.,

E. V. STACE, Major,
Assistant Political Agent, Jhalawad Prant.

BOMBAY CHAMBER OF COMMERCE, *1st February, 1883.*

Major E. V. STACE, Assistant Political Agent, Jhalawad Prant,
Wadwan.

SIR,—I am directed to acknowledge the receipt of your letter of the 23rd ultimo, and to inform you that you are in error in supposing that the Chamber has received any information lately regarding the existence of transit duties at Wadwan on cotton exported to Bombay and elsewhere.

The Committee, however, desire me to avail themselves of this opportunity to enclose a copy of the letter which they addressed to Major H. L. Nutt on the 13th May, 1880, regarding the transit fees then levied on cotton at the Wadwan Station Cotton Market, to which communication the Chamber has never been favoured with a reply.—I have, &c.,

J. GORDON, Secretary.

No. 1697 OF 1882-83.

CAMP PATRI, 6th February, 1883.

From Major E. V. STACE, Assistant Political Agent, Jhalawad Prant, to the SECRETARY to the CHAMBER of COMMERCE, Bombay.

SIR,—I have much pleasure in replying to your letter of the 1st instant, and giving the information asked for in your previous letter therein referred to ; and this especially, as entirely erroneous ideas exist regarding the Wadwan Civil Station Cotton Market, even amongst those who have much to do with it.

2. Before the year 1864 there was no British Station at Wadwan at all. Government required a certain extent of land for a Civil Station, and induced the Wadwan Chief to grant them a large plot measuring about 1 mile long by 1,000 yards broad. The granting to Government of this land in perpetuity was made on certain conditions, and the agreement entered into between the Government (as represented by the Political Agent) and the Chief is to be found at page 425 *et seq.* of Aitchison's Treaties. I specially note this as it shows a formal agreement, whether such ought to be infringed upon or broken without the voluntary consent of both parties is not for me to say.

3. One of the conditions of the agreement was that, *for reasons duly set forth* therein, the Wadwan Durbar should be allowed to levy certain taxes on goods leaving the British Civil Station. The statement detailing these is to be found appended to the agreement at page 428 of Aitchison's Treaties. Amongst the articles mentioned is cotton. It is here to be noted that this agreement *does not refer to cotton only* but to many other articles. So that the question of the levy of taxes *cannot be viewed with reference to cotton only* : it must be considered with reference to the general right to levy taxes on various articles. This is important, and has not received due consideration from those who object to the tax on cotton.

4. By the agreement the tax on Cotton leviable by the Durbar was 5 annas per maund of 1,600 tolas (Rs. 6½ per candy). But, besides this, the levy of "transit duty," as then existing throughout the province, was specially and separately sanctioned by the agreement. This "transit duty" has since been abolished, the customs duties being retained. I mention this to show clearly that the tax on cotton was not "transit duty," but recognised as an "export" duty : the words "export duty" are used in the statement.

5. By subsequent arrangements which were duly authorised, the tax on cotton leaving the Civil Station became modified thus :—

8 Annas per candy on cotton pressed	elsewhere.
10 do.	do.
	in the Civil Station.

Of the 8 annas the Wadwan State gets 2½ annas, and of the 10 annas it gets 5 annas.

Regarding the balance I shall speak presently. But I must ask to press upon your notice that the Wadwan share was granted for specific reasons mentioned in the agreement, and in compensation for

losses which have resulted from the establishment of the Civil Station affecting the trade of Wadwan city and taluka.

6. Here I may mention that all the States of Kathiawar levy customs or export duties on cotton, and that it was partly in compensation for such loss to Wadwan that the taxes on various exports from the Civil Station were agreed to. Some of the States have been in the habit of levying a higher rate than the Wadwan State. Whether Government would have the right or not to interfere with such customs duties in foreign territory, it is not for me to state. But were the cotton "market" abolished at once, it would in no way affect the right of Wadwan to levy what they please on cotton in the taluka.

7. I trust I have now clearly shown that no "transit" duty is levied at all on cotton, but that what is taken by the Durbar (which has given over a share to the market) is partly compensation for loss of customs duty, which would but for the institution of the "market" have been leviable in the taluka and partly compensation for other causes affecting the State. For instance, I may note that but for the establishment of the Civil Station at a distance of three miles from Wadwan city, the two railways would undoubtedly have had their terminus at the city and not at the Station, with a corresponding benefit to the Durbar. Also that merchants now settled in the Civil Station would have, perforce, established themselves in the city, and from these the Durbar could levy what it pleased as export duty.

8. The reason of the charge of 2 annas on cotton pressed in the Station is this : all cotton pressed in the different talukas pays a pressing fee to the Chief of the taluka. Cotton is not now pressed in Wadwan City, but in the Civil Station instead, and this pressing fee is thus merely compensation for a fee which would otherwise have been collected in Wadwan. To deprive Wadwan of this would be scarcely fair, as all the other States levy this fee.

9. The portion of the custom dues which comes to the Station is expended entirely for municipal purposes, and without this we would have no adequate means of maintaining the Station. There are several public buildings, such as Hospital, Library, School, &c. &c., built at the cost of different Chiefs ; these have to be maintained ; roads are made and repaired ; the conservancy and lighting establishments and the Station Police, &c., are paid from this fund. There are various other calls upon it which I need not detail here ; but it will suffice to say we have not one rupee too much.

10. The cotton "market" has certainly failed as a market ; the ryots will never come there with their cotton for sale. Nor can it be expected for various reasons. Amongst others is the system of "forward contracts." Again, it would not pay either growers or merchants, for the former to bring in their small parcels of cotton (each cultivator his share of the produce of his field). Cotton is purchased in bulk by exporters after it has been sold by the cultivator to the village Wania and then cleaned. I do not consider that the cultivator could get on at all without the intervention of the "middle man" as he is termed. There are many reasons for this, which I could easily give in detail.

The "market" is, therefore, really merely a place for collecting the

custom dues and the pressing fees. But it also answers a very useful purpose in checking the adulteration of cotton, for all cotton found to be adulterated is opened out and cleaned (as far as possible) at the expense of the owner. The knowledge of this checks adulteration.

11. With regard to the last para. of your letter of the 13th May, 1880, I beg to point out the abolition of the market would not in any way prevent the Chiefs from levying what they please as export dues and pressing fees. If the share from the cotton market receipts now going to the Wadwan Durbar were stopped, the Chief would, without doubt, recoup himself by an increase of what is called the *deshdan* levied on cotton in the villages by all the States, and by establishing presses in Wadwan City and compelling owners of cotton in his taluka to have their cotton pressed there.

Should you wish further information, I shall be happy to give it.—I have, &c.,

E. V. STACE, Major.,
Assistant Political Agent, Jhalawad Prant.

APPENDIX N.

IMPROVEMENT AND CULTIVATION OF COTTON IN THE DHARWAR COLLECTORATE.

No. $\frac{S. R.}{761}$ OF 1883.

CAMP DHARWAR, 17th June, 1883.

From ARTHUR CRAWFORD, Esq., Commissioner, Southern Division,
to the SECRETARY to the CHAMBER of COMMERCE, Bombay.

SIR,—Acting on the advice of my friend, Dr. Forbes Watson, when he was with me at Hubli last year, I had all the exotic cotton pods that could be found with 5 bolls or seeds to be picked and sent to our factories. In like manner, I caused a large quantity of the 4-bolled pods (which are much commoner) to be picked and sent in. The learned Doctor had observed that the plants carrying 5-boll pods were the stoutest of all ; while those carrying 4-boll pods were much superior to the plants carrying only 3-boll pods. The cotton of the 5-boll pods was decidedly superior to that of the 4-boll pods, which again was vastly superior to the ordinary cotton.

2. The kuppas was purchased from the owners and ginned by Saw Gin's manufactories fitted with the new Emery saws and grids. The seed was then issued to well-to-do ryots, who were persuaded to sow it in the best lands ; each kind (5 and 4-boll seeds) unmixed with any other seed.

3. Though the season was far from favourable, the results of the experiment were very encouraging. The kuppas produced was of very superior quality, the pods were very fine, large and well filled, and the kuppas immeasurably superior, especially at Hubli, to any that has been produced for some years in the Southern Maratha Country.

4. As arranged with the ryots, all the kappas has been brought into our factories, and will be ginned in the improved gins, the seed being retained and re-issued at sowing time to well-to-do ryots to be sown on carefully selected fields of not less than five acres each.

5. We have now carefully collected, as above described, sufficient seed to sow this year 1,200 acres altogether in the four principal cotton growing talukas, and I am confident that if the experiment be steadily persisted in for a

few years, the Chamber will find a very great improvement in the Dharwar cotton, especially with the general use of the newly fitted gins, which were too late for the crop of the present year.

6. Nevertheless, do what we will, it is very difficult to prevent the ryots from mixing the seed : and I understand that it is this, careless or fraudulent, mixing of exotic with indigenous cotton that has given Dharwar cotton so bad a name since the famine. The law does not aid us, and there is no prospect of fresh legislation ; but I am

1. Hubli.
2. Gadag.
3. Bankapur.
4. Karajgi.

very sanguine that if the Chamber will help me, the ryots may be stimulated to refrain from mixing and induced to improve the quality of their kuppas.

7. This, next year, in connection with this selection system I have above described, we are going to offer a prize of Rs. 50 for the best and most carefully weeded and cultivated five acre lot sown with the selected seed, provided it be unmixed. This is as much we can do with the funds at disposal, but it is not nearly enough; weeding alone is very expensive in the black soil plain, and ought to be constantly carried on, and one small prize in each of the four talukas will not, I fear, produce marked effect. I should like to be able to offer three prizes in each taluka, viz.—

1 of Rs. 150 ...	...	...	...	...1st prize.
1 of Rs. 100 ...	...	...	...	...2nd „
1 of Rs. 50 ...	...	...	...	...3rd „

in each of the 4 Talukas.

8. This would, however, require Rs. 1,200 of which I have only Rs. 200 available as above explained. I write, therefore, to ask if the Chamber can and will place the (to it) comparatively insignificant sum of Rs. 1,000 at the disposal of the Collector for the next season's rewards.

9. If unhappily the Chamber has no funds at its disposal, or declines to aid me, I must fall back upon the well-known liberality of individual merchants. I am convinced that while coercion has failed utterly in checking those fraudulent practices which have given the once renowned Dharwar cotton so bad a name, the ryots can be *led* to refrain from them by being shown that it pays them better to be careful and honest.

10. Next year I propose to give public notice of the amount of selected cotton (available for sale on account of each ryot at each factory, and I hope that it may be looked after and purchased by respectable agents who will send it unadulterated to Bombay.

11. The prizes would be awarded on the standing crops by a Panchayat or Committee composed of the best experts, European and Native, to be found in the district. Some little eclat will attend the presentation of the prizes. The names of the prize-holders will be notified throughout the cotton-growing talukas, and no effort will be spared by the District officers to popularize the scheme.

12. Earnestly soliciting the co-operation of the Chamber, I beg that I may be favoured with an early reply, so that I may publish the details before sowing time (August).—I have, &c.,

ARTHUR CRAWFORD, Commissioner, S. D.

BOMBAY CHAMBER OF COMMERCE, 3rd July, 1883.

To ARTHUR CRAWFORD, Esq., Commissioner, Southern Division.

SIR,—I have laid before the Committee of the Chamber your letter No. ^{SR} 761, dated the 17th ultimo, in which you ask if the Chamber will

place the sum of Rs. 1,000 at the disposal of the Collector of Dharwar for the prizes which you propose giving for the best and most carefully weeded and cultivated five acre lots of ground sown with selected seed provided it be unmixed.

The Committee desire me to say, in reply, that the giving of prizes for encouraging the production of cotton in India, and the improvement of its quality, appears to them to be more immediately the function of Government; and in former years this was done by Government to a considerable extent, as you will see from the Resolution of the Governor-General in Council, dated 9th August 1861, at pages 28 to 31 of the Annual Report of the Chamber for the year 1860-61. The Committee have, however, sent your letter on to the Cotton Trade Association, and suggested that if that body will contribute towards the amount which you require, the Chamber will supplement their contribution on the understanding, however, that Government will also contribute towards it.—I have, &c.,

J. GORDON, Secretary.

BOMBAY CHAMBER OF COMMERCE, 24th July, 1883.

To the SECRETARY to GOVERNMENT, Revenue Department, Bombay.

SIR,—I am directed by the Committee of the Chamber of Commerce to forward, for the information of Government, copy of a letter addressed to the Chamber by the Revenue Commissioner of the Southern Division.

The Commissioner's suggestion to offer prizes for the best and most carefully weeded five acre lots of ground sown with selected cotton seed, provided it be unmixed, is approved by the Chamber of Commerce and by the Bombay Cotton Trade Association; but it appears to the Committee that the giving of prizes for encouraging the production of cotton in India, and the improvement of its quality, is more immediately the function of Government; and in former years considerable grants were given by Government for this purpose, as will be seen from the Resolution of the Governor-General in Council, dated 9th August 1861; and they have informed the Commissioner, in reply to his letter, that if Government will contribute towards the amount required by him, the Chamber and the Bombay Cotton Trade Association will supplement the contribution.

The Committee, therefore, desire me to ask if His Excellency the Governor in Council is disposed to contribute towards the amount required by the Commissioner for the object which he has in view.—I have, &c.,

J. GORDON, Secretary.

No. 5942 OF 1883.

REVENUE DEPARTMENT,
BOMBAY CASTLE, 10th August, 1883.

To the SECRETARY to the CHAMBER of COMMERCE, Bombay.

SIR,—In reply to your letter dated the 24th ultimo, I am directed to state, for the information of the Chamber of Commerce, that His Excellency the Governor in Council is willing to contribute Rs. 500 in addition to the sum stated by Mr. Crawford to be available towards the prizes proposed by the Commissioner, S. D., to be awarded for encouraging improved cultivation of cotton in the Dharwar Collectorate, and trusts that as the improvement of Dharwar cotton is of great importance to the mercantile community, the Chamber of Commerce and the Cotton Trade Association will be able to provide the balance of Rs. 500 desired by the Commissioner, S.D.—I have, &c.,

J. MONTEATH,
Acting Under-Secretary to Government.

APPENDIX O.

CULTIVATION OF DIFFERENT KINDS OF COTTON IN THE KHANDAISH COLLECTORATE.

No. 2823 OF 1883.

LONAULI, 11th April, 1883.

From the COMMISSIONER of CUSTOMS, SALT, OPIUM and ABKARI, to
the SECRETARY CHAMBER of COMMERCE, Bombay.

SIR,—I have the honour to forward herewith copies of some correspondence that has lately passed between some of the district officers in Khandeish and the Collector of that district and the Commissioner, C. D., on the subject of the cultivation of different kinds of cotton, and the prices locally realised for cotton of each kind, in certain talukas (Sindkhera, Sirpur, and Chopra) of Khandeish. These papers will, I think, be found to contain matter of interest to many members of the Chamber, and I shall be glad to be favoured with the views of the Committee on the points treated by Messrs. E. P. Robertson and Probert. I am somewhat surprised at the high prices for Waradi cotton, as compared with those ruling in the same localities for Hinganghati and Dharwardi, quoted in the statement appended to Mr. Probert's letter, and it will be interesting to learn whether those quotations accord with the experiences of the Chamber. If Mr. Probert's quotations are correct, there would seem to be but little present difference between the market values, weight for weight, of the different kinds of cotton grown in Khandeish, and as there is no doubt that the average outturn per acre of the Waradi variety is very much large in that district than that of all other varieties, the advantage of checking the cultivation of the Waradi plant would seem to be at least questionable.—I have, &c.,

C. B. PRITCHARD,
Commr. of Customs, Salt, Opium and Abkari.

PRECIS OF A CORRESPONDENCE ON THE SUBJECT OF CULTIVATION OF DIFFERENT VARIETIES OF COTTON IN THE NORTHERN DIVISION OF THE KHANDAISH COLLECTORATE.

Report No. 23, dated 14th October 1882, from the Patil and Kulkarni of Mouje Kamkhede Taluka, Sindkheda, states that, in accordance with the orders of Government, the people grew Hinganghat and Dharwari cotton in their village, but they found it very difficult to obtain customers for their cotton.

That they don't sell *pucka*, i.e., cleaned cotton; the retail dealers generally advance them money on promise of delivering the goods

when ready. These retailers then clean the cotton and sell it to Bhatyas and other dealers from Bombay.

That the present rates of uncleaned cotton are as follows :—

Hinganghat per khandi	...	...	...	...	...	Rs. 85
(Purchasers do not buy willingly.)	...	...	...	...	...	
Dharwadi per khandi	...	...	...	...	...	„ 100
Waradi do.	...	...	...	...	...	„ 95

A khandi is equal to 880 seers. The last mentioned quality is purchased with great willingness and zeal on the part of the retail dealers, but the latter do not mention the name of the cotton in the bonds they give and take.

This is the way in which varieties of cotton are generally sold, and the sales for this year have now commenced.

The customers purchase Hinganghati cotton very reluctantly and do not take possession of it immediately. They accept and prefer Dharwadi, but that variety does not thrive well in the country situated on the banks of the Tapti. The people, therefore, do not sow Dharwadi seed this side. For Hinganghati there is very little or no demand, and Waradi consequently secures all customers.

Now as regards Hinganghati they say that they do not object much if that quality fetches less than the other kinds, but the worst thing is that there is very little demand for that sort, and they therefore request that until the season for buying *kacha* (uncleaned) cotton is over, the sale of Waradi cotton should be stopped by authority in order to provide customers for their Hinganghat cotton grown by order of the authorities ; that if this be not done, the people, who have lately grown Hinganghat cotton in their fields by the orders of Government, will not hereafter listen to the advice and entreaties of the local officers. If Government desire to verify what they state, enquiries should be made independently of them.

Report of the Mamledar of Sindkheda, No. 238, dated 21st October, 1882.

Forwards the above report and states that as Hinganghati and Dharwadi are the only kinds allowed by Government to be grown, it is necessary, he thinks, that some restriction should be placed on the sale of Waradi cotton by requiring the dealers to purchase the other kinds first.

Order from Mr. Deshmukh thereon.*

“There is no provision of law under which any action could be taken in accordance with your suggestions. The report may be filed.”

Further Report from the Mamledar of Sindkheda, No. 354, dated 4th December, 1882.

“If nothing can be done in the matter, there is no possibility of extirpating Waradi cotton from the district as is desired by Govern-

* No. 536, dated 30th November, 1882.

ment. If the wishes of Government are to be carried out, some arrangement, even if it differs from that suggested in my report, must be made under the sanction of superior authority. If the cultivation of Waradi cotton is prohibited by orders, it will be necessary also to prohibit its sale or consumption. It will be better if this matter is brought to the notice of the Collector."

*Orders to the Mamledars of Chopda, Shirpur and Virdel,
V. M., No. 600, dated 12th December, 1882.*

"Please report at what rate per khandi Hinganghati, Dharwadi, and Waradi kinds of cotton are sold by the ryots and purchased by the sowkars."

Report from the Mamledar of Chopda.

"Kacha (uncleaned) cotton is sold at the following rates :—

Hinganghat per khandi	Rs. 95
Dharwadi do.	„ 95
Waradi do.	„ 100

It is not the case that the cultivation of Waradi has been put a stop to by the stringent orders issued. The signatures of cultivators have been obtained in acknowledgment of those orders, and yet the cultivators of about 20 villages have grown Waradi cotton. This fact has already been brought to the notice of the Huzur.

The Cotton Frauds Act 7 of 1878 contained no provision prohibiting the cultivation of Waradi cotton, and even that Act has been repealed, and consequently the ryots take advantage of such an omission. There is no great difference in the rates of the different varieties, and the expectation of an abundant yield of Waradi cotton has induced some of the ryots to cultivate that sort even in the face of strict orders to the contrary, &c. &c.

*Report of the Mamledar of Shirpur, dated 23rd
December, 1882.*

The rates of uncleaned cotton prevailing in the taluka are :—

Hinganghat	per khandi	Rs. 90 to Rs. 95
Dharwadi	do. „	100 to „ 103
Waradi	do. „	100

Dharwadi and Hinganghati cotton do not thrive well in the soil of this taluka.

Dharwadi cotton grows well on hard yellowish pale coloured soil ; in all other soils this crop fails.

The Waradi cotton thrives in any sort of soil and very rarely fails.

Hinganghati is liable to several diseases. The pods do not properly develope and remain green. It also fetches a lower price than the other two kinds.

Waradi cotton is best suited for the soil of this taluka. It yields

an abundant crop, generally double that of the other kinds. You have already tried an experiment and ascertained the truth of my statements. Besides this, Waradi fetches a better price in the market, and on account of all these advantages the people are desirous of cultivating Waradi cotton.

The people of Jatod Borgaon, Wanawal, &c., who grew Hinganghati and Dharwadi cotton in obedience to orders have certainly sustained loss this year.

On account of the disadvantage above shown, the people will not listen to our advice, and as we have no orders to prohibit the growth of Waradi by force, I am helpless. It will be better if the sale or purchase of Waradi be restricted as its cultivation is prohibited. I hope, however, some *bandobast* will be made by the superior authorities after due consideration.

From the experiment tried this year it has been found by yourself that the yield of Waradi cotton per guntha was six seers, while that of Hinganghati was only three seers.

*Report of the Mamledar of Sindkhera, dated 3rd
January, 1883.*

"The "Sarkali" (uncleaned) cotton is being sold at the following rates in this taluka :—

Hinganghat	per khandi Rs.	95
Dharwadi	do. "	110
Waradi.....	do. "	105.

"From the experience I have gained this year, I can state the Hinganghati cotton was a little better than usual where grown in hard and somewhat yellowish soil, although in no way equal to Waradi; while in rich black soil the yield of the Hinganghati cotton was not even $\frac{1}{2}$ th of that of Waradi."

*Report by Mr. Deshmukh, Assistant Collector, dated 21st
February, to the address of the Collector.*

"In accordance with the circular order, I append herewith Gaonwar lists received with the report.

"On receipt of the report from the Mamledar of Sindkheda, I ordered details as to the prices of Hinganghati, Dharwadi and Waradi cotton prevailing in the three talukas under my charge. There is a difference of from Rs. 5 to Rs. 10 in the prices of Waradi cotton as compared with the other varieties, either above or below the prices of those varieties, but the yield of the Waradi is double that of other varieties.

"It is in vain, I think, to expect the people to listen to advice or threats at the expense of their pecuniary gains. The ryots of Malsar said in *my presence* that last year they were deceived and killed, but that next year they intend growing Waradi cotton."

"In another correspondence on the subject of cotton cultivation I

have stated in my endorsement—Chopda—register No. 338, dated 8th February 1883, that Waradi cotton, being considered a separate variety, finds its way into foreign countries, and consequently it fetches a better price; but on further enquiries I find such is not exactly the case. It is true that Waradi cotton fetches a little lower price, but although it is not exported to England or other foreign countries, where there is a great demand for a fine and long staple, still it is exported to China and Rajputana, and on that account its price falls but little short of the other varieties, viz., Dharwadi and Hinganghati. The difference in price, however, when compared with its greater yield, is comparatively very small, and the difference in reality exists only when the Waradi passes under its real name. The advantages of growing Waradi cotton are, I believe, thoroughly understood by the cultivators."

W. H. PROPERT.

STATEMENT showing the rates per Khandi of cleaned as well as uncleared Cotton, during the year 1882-83, one Khandi equal to 800 Seers.

No.	NAME OF TALUKA.	HINGANGHATI.		DHARWADI.		WARADI.		Remarks.
		Rate per Khandi of Uncleared Cotton.	Rate per Khandi of Cleaned Cotton.	Rate per Khandi of Uncleared Cotton.	Rate per Khandi of Cleaned Cotton.	Rate per Khandi of Uncleared Cotton.	Rate per Khandi of Cleaned Cotton.	
1	2	3	4	5	6	7	8	9
1	Dhulia	85	310	91	320	91	310	
2	Amalner	81	280	87	287	87	280	
3	Parola	88	320	91	320	88	300	
4	Erandol	85	275	103	320	98	307	
5	Pachora	85	295	100	280	75	230	
6	Bhadgaon	84	284	90	300			
7	Chalisgaon	100	285	93	287	72	267	
8	Nandurbar	88	287	105	290	90	280	
9	Shehoda	82	250	96	294	91	274	
10	Virdel	87	300	91	260	87	250	
11	Shirpur	82	287	93	307	93	300	
12	Chopda	87	287	87	287	91	275	
13	Sauda	102	306	100	305	100	293	
14	Yawal	100	320	100	320	105	300	
15	Raver	91	300	91	300	...	...	
16	Bhusawal	96	306	90	306	...	...	
17	Kdabad	90	294	...	...	85	293	
18	Nasirabad	90	300	100	300	85	308	
19	Jamner	87	308	90	314	87		
	Total ..	1623	5307	1710	5397	1310	4287	
	Average ..	90	295	95	300	89½	286	

CAMP, LANCKHANI, KHANDEISH, 27th March.

MY DEAR ROBERTSON.—You are a man who has been much in cotton districts. Please read the accompanying precis of a correspondence relating to the various sorts of cotton and their growth, particularly with reference to the Tapti districts of Sindkheda, Shirpur, and Chopra.

I was thinking of developing the enquiry and referring the matter for the consideration of Pritchard and Chamber of Commerce swells in Bombay. If Hinganghati is so unsatisfactory and difficult to dispose of in some of our talukas, it seems to me that we cannot continue to insist upon its growth. Any way, the price of Waradi is undoubtedly high, and if people can get in certain talukas nearly double the quantity of crop, and sell the proceeds *nearly* as high as the price obtained for Dharwadi and Hinganghati, how can we attempt to insist upon the production of the two latter sorts only.

The cotton season is coming on, and Government will be annoyed if Waradi again comes to the front. Read this and give me your opinion, and kindly send this and the papers to Pritchard, and ask him to record his opinion. I want the papers back, as I have no fair office copy.—Yours very sincerely,

W. H. PROPERT,
Collector of Khandeish.

No. $\frac{R}{1619}$ OF 1883.

CAMP MAHABALESHWAR, 3rd April, 1883.

Forwarded to Mr. PRITCHARD.

2. It would be well if the Chamber of Commerce could express an opinion.

3. My own view has always been that it is our duty to show to the ryots what is considered the best cotton to plant, but that we have no legal or moral right whatever to interfere with their liberty of action. They are keen enough observers of what pays, and they will certainly in the long run only sow that which pays them best.

4. I am fully aware that some years ago Mr. Ashburner gained great praise and a name by prohibiting the cultivation of Waradi and by compelling those who grew cotton to cultivate Hinganghati. I have always been astonished that this procedure was so greatly praised. A very few years after one or two employés in the Cotton Department in the Dhawar district incurred the very severe displeasure of Government, and narrowly escaped dismissal because they pulled up a few plants of country cotton growing in a field planted with Dharwar American. It would be interesting to learn how much Waradi was in a similar manner destroyed in Khandeish under authority and Hinganghat forcibly introduced.

5. I consider that the Government officers have no right to interfere. All that can be done by persuasion and pointing out which is

the most advantageous crop to plant should be done. But the ryot must be left perfectly free to cultivate the plant he finds most suitable and profitable. If there is no market or only an inferior market for the staple he grows, he will soon see and feel that and take to another and more favourite quality.

6. It is a mere question of supply and demand ; as soon as the demand for Waradi ceases, then the ryot will cease to grow it,

ELPH. P. ROBERTSON, Commissioner, C. D.

BOMBAY CHAMBER OF COMMERCE, 28th July, 1883.

To the COMMISSIONER of CUSTOMS, Salt, Opium and Abkari, Bombay.

SIR,—I have the honour to acknowledge the receipt of your letter No. 2823, of the 11th April last, forwarding copies of a correspondence that had passed between some of the district officers in Khandesh and the Collector of that district and the Commissioner, C. D., on the subject of the cultivation of different kinds of cotton and the prices locally realized for cotton of each kind in certain talukas of Khandesh ; and requesting that you may be favoured with the views of the Committee on the points treated by Messrs. Robertson and Propert.

The correspondence was forwarded by the Committee of the Chamber to the Bombay Cotton Trade Association for their opinion, the receipt of which was delayed in consequence of the papers arriving at the height of the shipping season ; and I am directed to forward to you herewith a copy of the memorandum which they have addressed to the Chamber on the subject—I have, &c.,

J. GORDON, Secretary.

BOMBAY COTTON TRADE ASSOCIATION.

MEMORANDUM.

It was the unanimous opinion of the Committee of the Cotton Trade Association that the comparatively high price which these reports show are obtained for Waradi cotton, as compared with Dharwar and Hinghghat descriptions, arises from the fact that it is used mainly for purposes of admixture with better stapled varieties. So long as this is the case, there is no doubt that Waradi cotton will realise a price out of proportion to its own merits, but so soon as the production gets beyond what can be got rid of by admixture, a very serious reduction in price will have to be accepted by the growers. This admixture has already become so common and well known in Bombay that the Cotton Trade Association has passed distinct rules with the view to discouraging it. The discussions which took place at the General Meeting of the Cotton Trade Association, held in the month of April last,* will show that in Bombay everything possible was being done, and the Committee of the Cotton Trade Association

* Vide *Bombay Gazette* of April last, sent herewith.

are of opinion that during the next season the effect of the new rules will be very marked. The reputation of Khandeish and certain parts of Berar Cotton has been seriously injured by the admixture during the past two years of the short stapled varieties and serious complaints are coming from Europe in connection therewith. Should the admixture not be stopped, the Committee think there is little doubt that the reputation of Khandeish and Berar cotton will be almost irretrievably ruined, and they think it would be advisable for Government servants to point out to the cultivators what the inevitable result must be of going on growing short stapled descriptions. Intrinsically to a manufacturer it is not worth more than Bengals, or say something like 20 per cent. less than good qualities produced from Hinghenghat seed. This inferiority will be even widened should the production be largely increased, and as a matter of fact a very large yield might render it practically unsaleable as the uses to which short stapled cotton can be put are limited.

APPENDIX P.

ALTERATIONS IN THE TONNAGE SCALE.

BOMBAY, 16th June, 1883.

JAS. THORBURN, Esq., Chairman, Chamber of Commerce.

DEAR SIR,—We, the undersigned members of the Chamber of Commerce, request you to call a General Meeting of the Chamber to consider the advisability of altering the Tonnage Scale for Seeds and Wheat, and to pass such resolutions as may be agreed to.

Yours faithfully,

WALLACE & Co.	p.p. GADDUM, BYTHELL & Co.,
p.p. FRAMJEE, SANDS & Co.,	F. HOOPER.
ROBERT LEE SANDS.	JOHN MARSHALL.
DAVID SASSOON & Co.	LANG, MOIR & Co.
E. SPINNER & Co.	p.p. C. MACDONALD & Co.,
PUNNETT & Co.	JAS. W. BROWN.
LYON & Co.	p.p. OWEN & OKELL
GREAVES, COTTON & Co.	GEO. McLAREN.
VOLKART BROTHERS.	E. D. SASSOON & Co.
KILLICK, NIXON & Co.	NARANDAS RAJARAM &
RITCHIE, STEUART & Co.	Co.
p.p. GEORGE LOCKHART & Co.,	p.p. RALLI BROTHERS,
JAMES POUTZ.	J. FACHIRI.
GLADE & Co.	BENN, ASHLEY & Co.
p.p. A. BLASCHECK & Co.,	C. H. B. FORBES & Co.
J. TINTNER.	ALDRIDGE SALMON & Co.
PEEL, CASSELS & Co.	

BOMBAY, 20th June, 1883.

The SECRETARY CHAMBER OF COMMERCE.

DEAR SIR,—At a meeting of merchants interested in the export trade held to-day, it was resolved that “ the Committee of the Chamber be respectfully asked to test, in the usual way, the following articles mentioned in the Tonnage Scale—namely, Wheat, Gingelly Seed, Rapeseed, and Mustard Seed, and state how many cwts. of each article are contained in 40 cubic feet, with the view of confirming the measurements given in a report of the Chamber, dated 3rd January, 1879.”

The information solicited is required for the General Meeting at which the adjustment of the present Tonnage Scale is to be discussed.—Yours faithfully,

M. MOWAT, Chairman of the Meeting.

BOMBAY CHAMBER OF COMMERCE, 23rd June, 1883.

M. MOWAT, Esq. (Ritchie, Steuart and Co.), Bombay.

DEAR SIR,—In reply to your letter of the 20th instant, I am desired to inform you that the Committee have ordered the measurement of the following articles mentioned in the Tonnage Scale—namely, Wheat, Gingelly Seed, Rapeseed, and Mustard Seed—to be again tested, with the view of confirming the measurements given in a report of the Chamber, dated 3rd January 1879. The measurements will take place in the godown of Messrs. Ralli Brothers, Carnac Bunder, on Wednesday, the 27th instant, at 8 a.m., and successive mornings; and the requisite notices have been issued.—I remain, &c.;

J. GORDON, Secretary.

BOMBAY CHAMBER OF COMMERCE, 26th June, 1883.

M. MOWAT, Esq.

DEAR SIR,—With reference to the testing of the measurements to take place at the godown of Messrs. Ralli Brothers to-morrow, at 8 o'clock a.m., and following mornings, the Meeting held in the rooms of the Chamber of Commerce on Wednesday last, of which you were Chairman, expressed a desire that a stevedore should be present to stow the bags in the Chamber's measuring box. The Committee will be much obliged to you if you will kindly request a stevedore to be present.—I remain, &c.,

J. GORDON, Secretary.

26th June, 1883.

Messrs. HILL AND GRENAN.

SIRS,—I will feel obliged by your sending a gang of men to-morrow (Wednesday) morning, and also on subsequent mornings, as may be required, at 8 o'clock, to Messrs. Ralli Brothers' godown, Carnac Bunder, to stow Wheat and Oil Seeds into a test box containing 200 cubic feet.

The Wheat and Seeds to be stowed in the same manner as on board ship.—Yours faithfully,

M. MOWAT.

30th June, 1883.

M. MOWAT, Esq. (Ritchie, Steuart & Co.), Bombay.

DEAR SIR,—With reference to your letter dated the 20th instant, I am directed to inform you that the measurement of the following articles, mentioned in the Tonnage Scale, has again been tested by the Committee, in the usual way, with the following results, viz. :—

Wheat (Ekdani), Soft White, from Jub-			
bulpore	18 cwt.	in 40 cubic feet.	
Teel Seed, from Hingunghat	15 do.	40 do.	
Guzerat Rape Seed	16 do.	40 do.	
Mustard Seed	16 do.	40 do.	

I remain, &c.,

J. GORDON, Secretary.

BOMBAY, 2nd July, 1883.

JOHN GORDON, Esq., Secretary CHAMBER of COMMERCE.

DEAR SIR,—I am in receipt of your favour of the 30th ultimo, and thank you for the information contained therein.

On behalf of the export merchants, who instructed me as their Chairman to ask the Committee to re-test Wheat and Seeds with a view to the reconsideration of necessary alterations and adjustments in the Tonnage Scale for Steamers, might I ask the favour of your kindly supplying each member of the Chamber with full particulars regarding the articles tested, and any other matters which may be of importance?—Yours truly,

M. MOWAT.

Results of the Measurements of Articles mentioned in the Tonnage Scale again tested with the view of confirming the Measurements given in a Report of the Chamber, dated 3rd January, 1879.

Notices of these measurements were duly given in the usual way, by advertisement, and by circular to members.

The Chamber's measuring box, 10 feet by 5 by 4, equal to 200 cubic feet, which had been used for the testings of 1872, and also for those of December 1878, was, on this occasion also, adopted as the basis of measurements.

Messrs. Ralli Brothers' godown, Carnac Bunder, Wednesday, 27th June 1883, at 8 a.m.

Present :

Mr. J. Fachiri,	Mr. J. Steiner,
„ L. R. W. Forrest,	„ J. Gordon, Secretary,
„ M. Mowat,	„ and
„ R. S. Campbell.	„ Hill, Stevedore.

WHEAT, SOFT WHITE, FROM JUBBULPORE (EKDANI).

The box was stowed under the direction of Mr. Hill, Stevedore, and the Meeting agreed that 45 bags of 2 cwt. each should be accepted, equal to 5 tons of 18 cwt.

Meeting adjourned till Thursday, 28th, at 3 o'clock p.m.

Messrs. Ralli Brothers' godown at Carnac Bunder, Thursday, 28th June 1883, at 3 p.m.

Present :

Mr. J. Fachiri,	Mr. L. R. W. Forrest,
„ J. Steiner,	„ J. Gordon, Secretary, and
„ M. R. Wyer,	„ Hill, Stevedore.

RAPESEED, GUZERAT.

The Meeting agreed that 16 cwt. should be the scale for steamers.

44 bags of 180 lbs. were stowed under the direction of Mr. Hill, Stevedore, and an addition of 6 bags unanimously allowed for vacant space.

The Meeting then adjourned till Friday, 29th June, at 9-30 a.m.

Messrs. Ralli Brothers' godown, Carnac Bunder, Friday, 29th June 1883, at 9-30 a.m.

Present :

Mr. M. R. Wyer,	|	Mr. L. R. W. Forrest,
„ J. Steiner,	|	„ J. Gordon, Secretary, and
„ J. Fachiri,	|	„ Hill, Stevedore.

YELLOW GINGELLY OR TILSEED FROM HINGHENGHAT.

The Meeting agreed that 15 cwts. should be the scale for steamers, 44 bags of $1\frac{1}{2}$ cwts. were stowed in the box under the direction of Mr. Hill, Stevedore, and $\frac{2}{3}$ rds of 11 bags allowed for vacant space.

The Meeting then adjourned till Saturday, 30th June 1883, at 9-45 a.m.

Messrs. Ralli Brothers' godown, Carnac Bunder, Saturday, 30th June 1883, at 9-45 a.m.

Present :

Mr. J. Fachiri.	|	Mr. J. Gordon, Secretary.
-----------------	--	---------------------------

MUSTARD SEED FROM KHANDEISH.

The Meeting agreed that 16 cwts. should be the scale for steamers. 55 bags of $1\frac{1}{2}$ cwts. were stowed in the box, but as there was some bulging over the top, 2 bags were deducted.

BOMBAY, 26th June, 1883.

JAMES THORBURN, Esq., Chairman of the Chamber of Commerce Bombay.

SIR,—With reference to your Circular, of the 23rd June, notifying that the Tonnage Scale of Wheat, Gingelly, Rape, and Mustard Seed will be again tested at Messrs. Ralli Brothers' godowns, we beg to inform you that for the reasons given in our protest addressed to the Chamber in January 1879, when the question was previously under discussion, we still consider it is very undesirable that any change should be made in the existing Tonnage Scale, which is now so generally known and well understood by shippers and shipowners, and we think it right to inform you that we cannot recognise any departure from the resolution passed by the Chamber, when the

present scale was agreed to in 1872, which fixed 16 cwt. as the maximum for goods carried by weight.—We are, Sir,

Your obedient Servants,

F. D. PARKER, Superintendent, P. & O. S. N. Co.
p.p. MACKINNON, MACKENZIE & Co.,
 D. McIVER, Agents, British India S. N. Company.
 J. JANNI, Agent, A.-H. Lloyd's S. N. Co.
p.p. EDWARD BATES & Co.,
 JAMES DICKSON.
 FINLAY, MUIR & Co., Agents, "Clan" Line.
 H. ZEENAL ABADEEN, Agent, Bombay & Persia S. N. Co., Ltd.
 F. BOZZONI, Agent, Navigazione Generale Italiana.

BOMBAY, 13th July, 1883.

JAMES THORBURN, Esq., Chairman, Chamber of Commerce.

SIR,—Having heard that a meeting of the Chamber of Commerce has been called for the 20th July, for the purpose of altering the Tonnage Scale in favour of shippers, we consider it our duty to protest, on behalf of our owners, against any change being made in it, unless with the mutual consent of shippers and shipowners. We have taken this step because we cannot of course be present at your Meeting, and we consider that the resolution agreed to, both by shippers and shipowners, and passed *unanimously* by your Chamber in 1872, and which has been in force ever since, viz., that the tonnage scale for steamers shall be on the basis of 40 cubic feet and 16 cwt. deadweight to the ton, ought not now to be upset by a majority of shippers voting in their own interests, without the concurrence of shipowners.—We are, &c.,

JAMES CLARK, *Master, s.s. Chollerton.*
 JOHN McDONALD, *s.s. Ashington.*
 JOHN HOLLOWAY, *s.s. Bombay.*
 WILLIAM LEGG, *B. Bay.*
 JOHN MUNRO, *s.s. Bernicia.*
 J. MILLIGAN, *s.s. Castledale.*
 C. M. HUNTER, *s.s. Raisby.*
 S. R. HILL, *s.s. Surrey.*
 ALEXANDER ROSS, *Master, s.s. Recta.*
 W. C. DENNES, *s.s. Wellfield.*
 WILLIAM PHIPPEN, *s.s. Miranda.*
 CHARLES STEPHENSON, *s.s. Tynemouth.*
 GEO. LUCOCK, *s.s. Lero.*
 V. PETERSON, *s.s. Hilda.*
 R. McIVER, *s.s. Clan Monro.*
 MAGNUS FLETT, *s.s. Airy.*
 R. GREEN, *s.s. Adirondack.*

THE CHAMBER OF COMMERCE.

A Special General Meeting of the members of the Bombay Chamber of Commerce was held on Friday the 20th July, 1883, in accordance with the foregoing requisition, at which the following Resolutions were passed :—

I.—That Rule I. prefixed to the Tonnage Scale be cancelled, and the following rule be substituted :—That the Tonnage

Scale for steamers shall be on the basis of 40 cubic feet to the ton, but in no case to exceed 20 cwt. dead weight.

II.—That the following alterations be made in the Chamber's Tonnage Scale for steamers, and that the same come into force on the 1st January 1884 :—

Wheat.....	from 16 cwt. to 18 cwt. to the ton.
Teel Seed	14 „ to 15 „ „
Rape Seed	14 „ to 16 „ „
Mustard Seed	14 „ to 16 „ „

The proceedings of the Meeting will be found at page 115 of this Report.

No. 381 OF 1883.

CHAMBER OF COMMERCE, KURRACHEE, 8th September, 1883.

The SECRETARY BOMBAY CHAMBER OF COMMERCE, Bombay.

DEAR SIR,—I am instructed by the Managing Committee of this Chamber to forward to you copy of a Resolution passed by the members at a General Meeting held on 30th August, 1883, and in doing so to call the attention of your Committee to the article "Jowaree" which, in view of the recent alterations in the Tonnage Scale, does not now stand as favourably as heretofore.

"Jowaree" having hitherto been classed with Wheat, both in Bombay and this Port, the Committee are of opinion that it should have the same measurement as that article now. With "Wheat" at 18 cwts. to the steamer ton, and "Jowaree" at 16 cwts., it can readily be seen that the latter would be at a great disadvantage—a disadvantage which, they think, is not borne out by actual measurement, and which, if it will not affect Bombay, will most prejudicially affect the trade that has lately sprung up in this article at this Port.

I am, therefore, desired by the Managing Committee to solicit the attention of your Committee to this article, in order that the same may be tested in the usual manner, and the result made known to this Chamber at your early convenience.—I am, &c.,

H. W. BROOKS, Secretary.

Copy of Resolution referred to above.

"That with the view to having a uniform Tonnage Scale for Western India, the Bombay Tonnage Scale be adopted for this Port, and that the same come into force on 1st January 1884."

APPENDIX Q.

UNIFORM TONNAGE SCALE AT ALL THE INDIAN PORTS.

No. 4 OF 1882.

BENGAL CHAMBER OF COMMERCE, CALCUTTA, *6th December, 1882.*

To D. WATSON, Esq., Secretary Chamber of Commerce, Bombay.

DEAR SIR,—I am directed by the Committee to furnish you with a copy, at foot, of a letter from the General Shipowners' Society, London, relative to the Tonnage Scale of this port, and of the reply which the Committee have instructed me to send to that communication.—I remain, &c.,

H. W. I. WOOD, Secretary.

GENERAL SHIPOWNERS' SOCIETY,
12, ST. MICHAEL'S ALLEY, CORNHILL,
LONDON, *13th October, 1882.*

H. W. I. WOOD, Esq., Secretary Bengal Chamber of Commerce,
Calcutta.

SIR,—I am directed to acknowledge the receipt of your letter of the 22nd May last relative to the revision of the Calcutta Tonnage Scale, and I am to state that my Committee have for some time past been expecting the further communication promised by you upon this important matter.

None however has as yet been received, and as considerable pressure is being brought to bear upon my Committee both by shipowners and shippers here (who alike desire to see this matter settled at an early date), I am directed to state that it is imperative that a solution of of this matter should be arrived at without delay.

My Committee have therefore to request that they may, by an early mail, be favoured with a definite reply to the proposal contained in my letter to you of the 21st April last.—I am, &c.,

W. H. COOKE, Secretary.

BENGAL CHAMBER OF COMMERCE,
CALCUTTA, *30th November, 1882.*

W. H. COOKE, Esq., Secretary General Shipowners' Society, 12, St. Michael's Alley, Cornhill, London.

SIR,—The Committee of the Bengal Chamber of Commerce direct me to acknowledge the receipt of your letter of the 13th of last month relative to the revision of the Tonnage Scale for the port of Calcutta, in

which you request a definite and early reply to the proposal contained in your letter of the 21st of April last, namely, the nomination of a Committee of Calcutta merchants in London to meet a similar number of shipowners for the purpose of having the scale adjusted on a fair and equitable basis.

In replying to your letter of the 21st of April I stated, under my Committee's instructions, that the subject had already been brought to this Chamber's notice by the East India and China Section of the Liverpool Chamber, that the Chambers of Commerce in India, Ceylon and Rangoon had been communicated with, and that so soon as they were in a position to do so my Committee would submit for you consideration the conclusions at which they might have arrived.

At the same time I informed you of the Bombay Chamber's reply, to the effect that until an answer was received from home as to whether the leading steam-ship Companies trading to that port, would consent to a scale of 50 cubic feet to the ton it would be useless, in the meantime, to take any further steps in the matter.

Since the receipt of that reply, dated the 22nd April, the Bombay Chamber has not placed before us any further communication on the subject—it may be assumed that the steam-ship Companies have not yet responded to the Chamber's reference;—and as the tonnage to and from Bombay is an important factor in the question under review—the steam and sailing entries and clearances aggregating not much less than those of Calcutta—it is essential to the solution of the matter that the views of the merchants of Bombay should be ascertained.

It appears to my Committee that this is the more expedient, since it is admitted by the Liverpool Chamber that while an almost general simple custom prevails in Calcutta, and that Kurrachee stands next in order of arrangement and fairness, at Bombay there is more irregularity, which is attributed to the use there of a separate Tonnage Scale for ships and steamers.

But leaving other ports out of consideration and directing attention to the position of Calcutta, the Committee find that the Liverpool Chamber, while anxious to have uniformity of usage at all the Indian, Ceylon and Burman ports, unhesitatingly give the preference to the system prevailing here; and they add that "Calcutta had declined further revisal on the ground of existing simplification known to work well."

The testimony thus borne to the fair and equitable principle on which the Calcutta Scale was originally prepared, and has been acted upon for nearly 30 years, is supported generally by the other Chambers, whose replies are hereto annexed for your information.

This being so, it appears to the Committee of this Chamber most important to consider the grounds upon which it is sought to disturb an arrangement of long standing, which has been found to work satisfactorily on the whole.

But your letter of 21st April conveys the expression of an opinion which is not in harmony with the views already referred to, and you urge the revision of our scale because contracts of affreightment cannot possibly be made as the scale contains so many inequalities.

The Committee do not quite follow you when you say that "when

charter-parties are made from Calcutta it is necessary to stipulate in those charter-parties the exact nature of the cargo which the ship is to take, whereas at some other ports the tonnage can be arranged as per printed scale at those ports :” for as far as their experience teaches them there is no more difficulty in arranging contracts under the Calcutta Scale than under the scales of other places ; and it would have been more satisfactory if you had placed before them practical illustrations of your objections and pointed out the revisions of which, in your judgment, the Tonnage Schedule of this port stands so much in need.

In the absence, however, of any suggestions or definite propositions from your Society, my Committee desire me to submit the result of their reference of the question to the members of this Chamber, which may be epitomised as follows.

It is generally admitted that a revision of the Calcutta Scale would be useful if it were confined to the removal of some anomalies in minor articles, and by the consequent arrival at a common agreement with other ports as to uniformity with regard to the ton of weight and measurement for corresponding articles of merchandise.

It has been suggested by some that it is expedient to go beyond this mere assimilation, and that, in order to secure any practically useful purpose, the revision should be made upon a common basis of weight and measurement, which would enable shippers to make forward engagements for “lawful merchandise,” and that by placing all articles on a proportionate parity of weight and cubical capacity, charters or fixtures of vessels can be more easily effected, and contracts of affreightment for whole ships at once carried through. The advocates of this proposal are confident that greater facilities would be afforded to business and an impetus given to trade, the freedom of which is more or less restrained by tonnage conditions now existing.

On the other hand, it is contended by a preponderating number of our members that the advantages expected to be derived from the proposed uniform scale of tonnage appear somewhat over-estimated so far as Calcutta is concerned ; that, admitting the existence of irregularities in the Chamber’s schedule which may be removed and rearranged with mutual benefit to shipper and shipowner, any radical change in a schedule which is locally acknowledged to work well, and which the Liverpool Chamber regards as being the most fairly-pitched scale in the East, would be open to grave objection ; that, if it were possible so to adjust the ton as to make charters for “lawful merchandise” fair alike to shipper and shipowner, no doubt an impetus would be given to business ; but it is not conceded that such an impetus would be an unmixed benefit.

However desirable the option of shipping under the proposed “lawful merchandise” ton arrangement may be, and the advantages are not denied in those cases where cargoes are necessarily limited to half a dozen denominations of staple produce, it is held to be an insurmountable difficulty as regards the large variety of articles always available for shipment from Calcutta and admit of varying assortments of cargo so as to suit the carrying capacities of ships and steamers. Not only does the build of each particular vessel require a special assortment of cargo to enable her to carry her best, but the varying conditions of the cargo itself makes it difficult to arrange a

schedule to meet all cases. Some articles in small quantity are desirable cargo, while in bulk they are objectionable in many ways, and sometimes even dangerous. It seems impossible, for instance, to frame a schedule which would make a full cargo of Wheat and Poppy-seed equally favorable to a ship without being unjust to shippers of the latter in an assorted cargo.

On all the grounds set out as above, there is a very strong objection on the part of a large majority of the members of this Chamber to adopt any change which would lead to the introduction of the ton of "lawful merchandise" as the basis of the Tonnage Scale; but there is no disinclination to make such improvements as may be usefully imported into the scale so as to arrive at such a uniformity of practice with other places as may be consistent with the generally admitted fairness and simplicity of the Calcutta schedule.—I have, &c.,

H. W. I. WOOD, Secretary.

CIRCULAR LETTER FROM THE BENGAL CHAMBER TO ALL CHAMBERS IN INDIA, CEYLON, AND BURMAH.

CALCUTTA, 5th April, 1882.

As you are aware, the East India and China Trade Section of the Incorporated Chamber of Commerce of Liverpool, has addressed a circular to the various Chambers of Commerce established in India with the object of advocating one uniform Tonnage Schedule for use at all ports in India, Ceylon and Burmah.

It is stated that such uniformity of usage is desired by most of the principal merchants at home and abroad: and it appears to be considered that, amongst the various schedules in vogue, that which is in force at this port is, upon the whole, the fairest to shipper and shipowner, the simplest, and generally the most convenient.

The Committees which have successively held office in this Chamber have hitherto hesitated to move in this matter because they have feared to disturb the schedule established here, which, whatever its defects, has upon the whole worked smoothly.

The present Committee, however, observe that in a letter to the Incorporated Chamber at Liverpool the Bombay Chamber indicates a willingness to adopt the general principle which runs through our schedule, viz., a ton of 50 feet alike for sailing ships and for steamers.

If this proposal of the Bombay Chamber should find acceptance amongst steam-ship owners, Kurrachee would probably be willing to follow; and as, elsewhere, the 50 feet basis is pretty universal, an important obstacle in the way of uniformity will have been removed.

No doubt many very troublesome questions would still arise when, passing from measurement goods, we came to fix the number of hundredweights which, in the several remaining articles of export, should be taken to represent 50 feet; and my Committee would be glad to learn whether in your opinion it is likely that we shall arrive at a common agreement upon such points.

To avoid misunderstanding, I am to add that it is quite recognised here that our schedule is not free from anomalies, and that it is far

from giving effect to the principle laid down by those who originally drew it up.

To show clearly what this was, I give the following extract from the Report of the Tonnage Committee of the Chamber, dated 20th August 1853.

"The Committee appointed by the Chamber of Commerce to prepare a Tonnage Schedule have agreed to submit the following with a recommendation that the Chamber adopt the same.

"It professes to be compiled on the following principle which has been adhered to as far as practicable. In all cases of doubt the Committee have resorted to actual experiments or to good data of actual shipments :—

"Goods paying freight by weight.

"The ton must not exceed 20 cwt. in weight, nor must it exceed 50 feet in measurement. When an article weighs above 20 cwt. to the 50 feet, the ton is reckoned at 20 cwt. ; where 20 cwt. measure more than 50 feet, that weight which measures 50 feet shall be deemed to be a ton.

"Goods paying freight by measurement.

"In this class no goods shall be comprised which do not weigh less than 20 cwt. to the 50 feet."

For convenience of reference I enclose a copy of the Liverpool Chamber's memorandum.

REPLIES TO CIRCULAR.

BOMBAY, 22nd April, 1882.

FROM BOMBAY CHAMBER.

I have to thank you for your letter of 5th April, on the subject of a uniform Tonnage Scale for all India, as suggested by the East India and China Trade Section of the Liverpool Chamber of Commerce.

The Committee instruct me to say that until a reply is received from Home as to whether the leading steam-ship Companies trading to this port will consent to a scale of 50 cubic feet, it will be useless in the meantime to take any further steps in the matter. Unless they consent, the Committee fear it would be difficult, if not impossible, to force a new scale upon them against their wishes.

Were this point settled, however, the Committee think it would be possible to arrive at some common agreement in fixing the number of cwts. of various articles which should be considered the equivalent of 50 cubic feet.

The general principles on which our Tonnage Scale has been fixed are exactly the same as those laid down in the end of your letter, except that for 20 cwt. and 50 feet you must read for this port 16 cwt. and 40 feet.

The Committee again thank you for your letter, and hoping to

address you soon again on the subject when our answer is received from the Chamber in Liverpool.

KURRACHEE, 29th April, 1882.

From KURRACHEE CHAMBER.

Your favour of 5th instant, referring to the proposed introduction of a common Tonnage Scale for the East was duly received, and has been considered. In reply, I am desirous to inform you that the members of this Chamber are in favour of one uniform scale, and consider the basis and principle you quote would be fair for all ports, but in view of the anomalies which are admitted to exist in your present scale, they would be glad to receive particulars of the alterations which your Committee purpose making.

MADRAS, 8th May, 1882.

From MADRAS CHAMBER.

Your letter of the 5th ultimo, advocating the adoption of a uniform Tonnage Schedule for India has been duly considered by the members of this Chamber, who approve generally of the views expressed in your letter.

I am desirous to inform you that this Chamber will be prepared to assent to such a Tonnage Schedule as may be suitable for the port of Calcutta, with such slight alteration, however, as may be necessary to meet the requirements of local trade.

RANGOON, 3rd June, 1882.

From RANGOON CHAMBER.

I am in receipt of your letter of the 5th April on the subject of the equalization of the Tonnage Scales at the Indian Ports, and asking whether, in the opinion of the Chamber of Commerce here, it is likely that we shall arrive at a common agreement in fixing the details of one uniform Tonnage Schedule for use at all the Indian ports.

In reply, I am directed to say that the Rangoon Chamber of Commerce consider it very desirable that one uniform Tonnage Schedule should be adopted, and would willingly co-operate in bringing about so desirable a result.

Of the existing schedules specified in the memorandum of the Liverpool Chamber, that in force at Calcutta is considered by the Chamber of Commerce here to be, on the whole, the most equitable; and in their opinion the general principle which runs through that schedule, viz., a ton of 50 feet for both steamers and sailing ships alike, should be retained in fixing one uniform schedule for all India.

COCHIN, 6th July, 1882.

From COCHIN CHAMBER.

Your letter, dated 8th June 1882, on the subject of a uniform Tonnage Schedule for use at all ports in India, Ceylon and Burmah, has been laid before the Chamber, and, in reply, I am directed to state

that it will be glad to render all assistance in its power in supporting a principle which would at once become a boon to shippers and ship-owners alike.

This question of tonnage has, for some time past, occupied the attention of the Chamber, more particularly in regard to the Bombay Scale, by which port, you are well aware, a large quantity of produce from this coast finds its way for transshipment. The schedule in vogue there is consequently a matter of great importance to coast shippers, more particularly so when, in the chief articles of their export, there is such a vast difference between the two scales.

I enclose a copy of the Cochin Tonnage Scale, and, with reference to those articles most largely shipped, I beg to give you the following extract from a letter addressed to the Bombay Chamber, which will show you clearly the arguments adduced in favour of a revision of the scale now in vogue at that port :—

"We now, as requested, place some facts before you for submission to the Chamber. It is unfortunate that the basis of the Steamer ton in Bombay should differ from the Ship ton, the former being 40 feet, and the latter 50 feet, but this would be a minor point if the equivalents in non-measurement goods were correct and just in the one and *pro rata* in the other. A glance at the two scales, however, shows that, making due allowance for the difference in the measurement basis, the equivalents do not agree, so that one or other must be wrong. This being the case, we assume, it must be accepted that a change is necessary, and only fair and just to all parties, and thus as a revision is necessary, we suggest that it be thorough and that all anomalies and inequitable equivalents be removed from both scales.

"*Coffee*.—Is the article in which Coast shippers are most interested, and we find that the Ship scale 16 cwt. in bags is taken as equal to 50 feet, and by the Steamer scale 12 cwt. as equal to 40 feet; both cannot be right, and we shall show later on that both are inequitable. The same scales take 16 cwt. of bag pepper and 13 cwt. respectively. Now pepper is very much lighter and occupies more space than coffee, so much so, that Coast shippers can only pack $1\frac{1}{2}$ cwt. to $1\frac{1}{4}$ cwt. of pepper into the same bags that easily hold $1\frac{1}{2}$ cwt. coffee. Hence, either the 16 cwt. scale is wrong for bag coffee or for bag pepper by sailer, and the steamer equivalents must necessarily be wrong. The Madras, Ceylon and Coast scales for coffee (the measurement basis being 50 feet) is 18 cwt., and it has been proved by incontestable experience that vessels laden with bag coffee carry much larger cargoes than those laden with measurement. It will be clear from this that 18 cwt. of bag coffee is not an excessive equivalent for 50 feet. On the contrary, 50 feet of coffee in cases weighs gross about 20 cwt., while the gross weight of 18 cwt. in bags is about $18\frac{1}{2}$ cwt., and there can be no two opinions as to whether bags or cases of the same articles make the better stowage, weight for weight.

"We are, however, not asking you to make the bag equivalent of 50 feet more than 18 cwt. nett, but as it is an established fact that 18 cwt. nett of bag coffee is more favorable to the ship than 50 feet of case coffee or other measurement, we think it not unreasonable that the bag scale be altered to 18 cwt. nett for ships and one-fifth less for steamers, or say, $14\frac{1}{2}$ cwt. net.

"The 50 feet equivalent in all other scales for pepper in bags is 16 cwt. and experience has shown this to be fairly equitable, so that there is

no need for a revision of this item. We may mention that the French official Tonnage Scale—the most scientific in the world—is in entire accord with the Colombo and Coast scales with regard to coffee and pepper in bags.

“The unreasonableness of the present Tonnage (Steamer) Scale for coffee in bags will be apparent, when we point out that about 16 cwt. to 16½ is the gross weight of 40 feet of coffee in cases, while the bag equivalent is only 12 cwt. and by the same scale.

“*Myrabolams*.—Nux Vomica and pepper are taken at 13 cwt., though far lighter than coffee; as are also teal, rape, mustard and gingelly seeds, though your Ship and Steamer scales take these at 17 cwt. and 14 cwt. respectively, and all are lighter than coffee.

“*Oil*.—This in your Ship scale is taken at 210 imperial gallons as equal to 50 feet, while in the Steamer scale it is taken at 40 feet *outside measurement* without the usual deduction of 20 per cent. for the round and bulging of the cask in the centre. The 40 feet measurement scale is just the equivalent of 210 gallons if the usual 20 per cent. be deducted for the round as is done at home and everywhere else when casks are shipped, and if there is no fixed equivalent as there is in your Ship scale and in the scales of all other Indian and Ceylon ports where oil is shipped. Casks are not stowed end to end, and bilge to bilge, but bilge and cantline, so that the outside measurement is far in excess of the space occupied when stowed in the hold of a vessel.

“*Sandal and Sapan Woods*.—It is only necessary to state the fact that your Ship scale is 16 cwt., while your Steamer scale is only 11 cwt., to show that in this particular also your two scales are illogical.

“*Coir Rope*.—Your ship scale is 8 cwt. and steamer scale 40 feet *outside measurement*, though here again, as in the case of oil casks, no Shipmaster or Stevedore in his senses would stow it so—

000000
000000

but so

00000
0000

by which means it does not occupy nearly the space in a vessel's hold equal to the outside measurement of each individual coil or cask.

“The Colombo scale is 12 cwt. and the coast scale 10 cwt. as equal to 50 feet. The Coast scale used to be 12 cwt. but as the result of experiment it was found 10 cwt., were a just equivalent of 50 feet when stowed, the scale was altered accordingly, and we suggest 10 cwt. for 50 feet and 8 cwt. for 40 feet as fair equivalents.

“*Coir Yarn in Dholls*.—Neither your ship nor Steamer scales provide for those. The Colombo scale is 12 cwt. and the Coast scale 10 cwt. The latter used, as in the case of coils of rope, to be 12 cwt., but as 10 cwt. was found to be the correct equivalent of 50 feet it was adopted, and we suggest that your scales be altered to 10 cwt. for 50 feet and 8 cwt. for 40 feet. It is a very remarkable fact that the P. & O. Company, the Rubattino Company and the Austrian Lloyd's steamers, which take cargo in Madras, Singapore, Colombo and Bombay should take the equivalents of the three former ports in the articles we name, as they are shipped at these ports, but will only take the Bombay unjust equivalents when they load in Bombay.

“The Messageries Maritimes Company's steamers also, when load-

ing in Madras and Ceylon, take coffee, oil, coir rope and coir-dholls by the Madras and Colombo scales without hesitation."

This letter, I may mention, receives the support of all the Coast merchants, and I cannot but think that you will agree that the points at issue are worthy of due consideration.

The Chamber is of opinion that the scale now in vogue on this coast is just and equitable to both shipper and shipowner. But as you rightly say there will doubtless arise many very troublesome questions when the time comes to fix the number of hundred weights which should be taken to represent 50 feet, in which case this Chamber would be perfectly willing to take into consideration any alteration or modification which might be deemed necessary in our existing scale, and to arrive at a fair and just proportion, I am to suggest that, when making actual experiments, a quantity not less than 50 tons (of 20 cwt.) be used.

COLOMBO, 11th August, 1882.

FROM CEYLON CHAMBER.

In reply to your letter of 5th April last, I am directed to state that the members of the Ceylon Chamber of Commerce are desirous of promoting the endeavours that are being made to arrive at uniformity in the schedules of tonnage for use at the ports in India, Ceylon and Burmah as far as may be practicable. At the same time I am to point out to you that as regards coffee, the staple export from Ceylon, there is much dissimilarity with respect to the character of the cargo and the packages in which it is shipped between it and the greater number of the exports from India and Burmah. The great bulk of the coffee crop is shipped in casks, varying in size, and the Tonnage Scale is 16 cwt. to the ton. When shipped in bags it is 18 cwt. to the ton. Coconut oil is shipped in casks at 17 cwt. to the ton and plumbago in barrels at 20 cwt. to the ton.

As other cargo in the shape of broken stowage is shipped in the same cubic space that is occupied in a ship's hold by the ton of cargo as indicated above, it is obvious that it would be very difficult to assimilate the rates for cargo in casks to those chargeable as measurement, and it is not considered desirable that any change should be made in the existing scale applying to such cargo.

As regards measurement, the ton of 50 cubic feet has always been adhered to in Ceylon, and uniformity, with respect to it, is strongly to be recommended.

I enclose copy of the Ceylon Tonnage Scale for your information.

EQUALIZATION OF THE TONNAGE SCALES AT THE INDIAN PORTS.

EAST INDIA AND CHINA TRADE SECTION OF THE

INCORPORATED CHAMBER OF COMMERCE OF LIVERPOOL,

LIVERPOOL, 23rd January, 1882.

Below is an extract from the Tonnage Schedules, adopted with the consent of the various Chambers of Commerce, for Ships and Steamers, at the Ports of India. It is the desire of most leading merchants, at

home and abroad, to have uniformity of usage at all the Indian, Ceylon and Burman Ports. The Calcutta Scale was revised some time ago, and goods were then ranged, for the most part, for both Ships and Steamers, under the standard ton of 20 cwt. for weight, and 50 cubic feet for measurement. The result is, that an almost general simple custom prevails there.

Kurrachee stands next in order of arrangement and fairness, but at Kurrachee, while cargo for *Ships* is engaged on the basis of 50 cubic feet, that for *Steamers* is taken at 40 cubic feet. Effort has, however, been made in all cases to fairly balance the comparative advantages of weight and measurement by a well ascertained mean. At Bombay there is more irregularity. The two different Scales for Ships and Steamers are used, as at Kurrachee, but less unanimity prevails between merchants and owners regarding the fair adjustment, or need for further regulation of the Scales for tonnage. Take, for instance, Wheat, Teelseed and Rapeseed. At Kurrachee, Wheat is fixed at 18 cwt. to the ton for Steamers, instead of 16 cwt. at Bombay; Teelseed and Rapeseed at 16 cwt., instead of 14 cwt. to the ton. There is an evident disadvantage to the Shipper at Bombay, and furthermore an unfairness, as proved by a Special Committee of the Bombay Chamber of Commerce in 1879, when Wheat at 16 cwt. to the ton was shown to represent about 36 cubic feet, instead of 40 cubic feet. At the other places, Madras, Cochin and ports of Ceylon, the custom is the same as at Calcutta, viz., "the same weight and measurement for both Ships and Steamers," but there is more or less need for a Scale uniform with other ports. In whatever manner it is to be obtained, uniformity is desirable for convenience of merchants and owners; if possible, an uniform basis for Ships and Steamers, as at Calcutta, and also a fair adjustment of weight to measurement, and a fixed Scale for each class of goods to be adopted by all ports alike. Correspondence has been carried on between the Chambers of Commerce of Bombay and Calcutta, but Calcutta has declined further revision on the ground of existing simplification known to work well. The state of feeling at Bombay points to the need for more uniformity there, and it is thought the matter demands the consideration of Ship and Steamship Owners in England, who could largely help in procuring the desired end.

EXTRACT from the Chamber of Commerce Tonnage Schedules for Ships and Steamers at Indian Ports.

ARTICLES.	KURRACHEE.		BOMBAY.		CALCUTTA.	MADRAS.	COCHIN.	CEYLON.
	Ship.	Steamer.	Ship.	Steamer.				
Cotton	50 ft.	40 ft.	50 ft.	40 ft.	{ 5 bales }	50 ft.	50 ft.	50 ft.
Wool.....	50 "	40 "	50 "	40 "	{ or 32 ft. }	50 "	50 "	50 "
Jute .....	....	....	....	....	{ 5 bales }	50 "	50 "	50 "
Linseed	18 cwt.	16 cwt.	18 cwt.	16 cwt.	20 cwt.	18 cwt.	18 cwt.	18 cwt.
Rapeseed	17 "	16 "	17 "	14 "	20 "	18 "	17 "	17 "
Gingellyseed	17 "	16 "	17 "	14 "	20 "	17 "	17 "	17 "
Teelseed	17 "	16 "	17 "	14 "	20 "	16 "	16 "	16 "
Pepper	16 "	13 "	16 "	13 "	20 "	16 "	16 "	16 "
Rice	20 "	18 "	20 "	16 "	20 "	16 "	16 "	16 "
Myrabolams	16 "	13 "	16 "	13 "	20 "	20 "	20 "	20 "
Wheat	20 "	18 "	20 "	16 "	20 "	20 "	20 "	20 "
Castorseed	17 cwt.	16 cwt.	17 cwt.	14 cwt.	15 cwt.	15 cwt.	17 cwt.	800 lbs.
Cinnamon, bales	10 "	8 "	6 "	12 "	18 "	18 "	800 lbs.	12 "
Coffee, in bags	16 "	12 "	16 "	5 "	12 "	18 "	18 cwt.	12 "
Cott, bundles	6 "	5 "	6 "	5 "	12 "	17 "	16 "	16 "
Cutch	16 "	13 "	16 "	13 "	18 "	17 "	16 "	16 "
Ginger, bags	12 "	10 "	12 "	10 "	16 "	12 "	12 "	12 "
Hides, bales	50 ft.	40 ft.	50 ft.	40 ft.	14 "	20 "	50 ft.	16 "
Horns, Cow	16 cwt.	12 cwt.	16 cwt.	13 cwt.	20 "	20 "	16 cwt.	16 "
Horns, Deer	8 "	6 "	8 "	6 "	20 "	16 "	12 "	12 "
Madder Root	12 "	8 "	12 "	8 "	50 ft.	210 imp. galls.	210 imp. galls.	15 "
Oil, in Casks	210 imp. galln.	40 ft.	210 imp. galls.	40 ft.	4 hds.	15 cwt.	15 cwt.	15 "
Paddy	16 cwt.	13 cwt.	16 cwt.	13 cwt.	20 "	20 "	18 "	18 "
Poppyseed	50 ft.	40 ft.	50 ft.	40 ft.	20 "	20 "	18 "	18 "
Tallow	13 cwt.	11 cwt.	13 cwt.	11 cwt.	16 "	14 "	14 "	14 "
Turmeric	13 cwt.	11 cwt.	13 cwt.	11 cwt.	16 "	14 "	14 "	14 "

EAST INDIA AND CHINA TRADE SECTION OF THE
INCORPORATED CHAMBER OF COMMERCE OF LIVERPOOL,
LIVERPOOL, 23rd January, 1883

DAVID WATSON, Esq., Acting Secretary to the Chamber of Commerce, Bombay.

DEAR SIR,—The Committee of the East India and China Trade Section of this Chamber have lately received a letter from the Bengal Chamber of Commerce relating to the Tonnage Scales at the various Indian Ports, about which the Secretary of the Chamber addressed you and them on the 13th February last.

In looking over your reply, dated 17th March last, this Committee note that "Bombay Shippers would be glad to go back to the standard of 50 feet for both ships and steamers," which is used at the majority of your ports. This would be a great step towards uniformity, and Kurrachee would probably follow your lead.

The feeling of the Madras, Cochin, and Ceylon Chambers, as shown by their letters to the Bengal Chamber, of which you have probably printed copies, is in favour of uniformity, and if one scale of measurement for both ships and steamers were adopted by all, the details in regard to leading articles shipped by weight would afterwards be made to correspond, as experiments would show the due proportion of each to be fixed, and doubtless what was proved fair would come to be allowed.

This Committee think that if the Bombay merchants would decide upon a uniform scale for ships and steamers and come to agreement with Calcutta, it would then be in their power to help the matter forward, and they would engage to do their best to obtain the consent of the ship and steamship owners here to the adoption of the Scales.

It has also been suggested that the experiments as to the relative weight and measurement of Wheat, Seeds, &c., should be made on as large a scale as possible.—I am, &c.,

R. GLADSTONE, Chairman of the Committee.

BOMBAY, 23rd February, 1883.

To the CHAIRMAN of the COMMITTEE, EAST INDIA AND CHINA TRADE SECTION, CHAMBER OF COMMERCE, Liverpool.

DEAR SIR,—I have submitted to the Committee of the Chamber your letter of the 23rd ultimo regarding the Tonnage Scales at the various Indian Ports.

In reply, they desire me to inform you that the communications which they have received from the Bengal Chamber of Commerce on the subject are expressed so strongly as to preclude all hope of any agreement being come to with Calcutta. If the Committee saw that the Bengal Chamber were prepared to correct and simplify their Scale, no doubt the merchants of Bombay would be willing to join in a movement for securing uniformity at the various Indian Ports. — I am, &c.,

J. GORDON, Secretary.

APPENDIX R.

THE PORT TRUST, 1883-84.

MEMORANDUM ON BUDGET ESTIMATES FOR 1883-84.

Estimates of the Income and Expenditure of the Trust for the year 1883-84 are herewith submitted to the Board, in compliance with the requirements of Section 52 of the Port Trust Act, 1879.

A Special Committee appointed by the Board, viz., the Hon'ble Mr. Sassoon, the Hon'ble Mr. Macaulay, Mr. Parker, and Mr. Vurjeebundass Madhowdass, has already revised these Estimates.

At this time last year, a remission of Dock rates was agreed upon to the estimated extent of Rs. 89,000, and of wharfage fees to the extent of Rs. 1,01,000. Notwithstanding these reductions, the traffic of the past year justifies my estimating the revenue for 1883-84 at Rs. 34,07,100, as against an estimate of Rs. 32,22,000 for 1882-83, while the expenditure is put down at Rs. 31,73,100 against an estimate for 1882-83 of Rs. 30,18,000. The apparent surplus for 1883-84 is thus Rs. 2,34,000.

As arranged last year, it is proposed to devote Rs. 1,00,000 of this surplus towards the Sinking Fund, which will be applicable either for the reduction of capital debt or for the prosecution of new works for which money would otherwise have to be borrowed.

In considering the direction in which any further remission of dues should be made, the reductions already effected in Dock and Wharfage rates must be remembered, and if the Trustees accept the Estimates now put before them, it is suggested that the shipping interest receive any benefit which these Estimates may warrant.

For the ensuing year the receipts from Port dues and Harbour revenue at existing rates are put down at Rs. 2,69,100, and the expenditure on Port account at Rs. 1,34,640, to which must be added the expenditure on new beacons, clearing rocks and the like, Rs. 44,250, or Rs. 1,78,890 in all. The accounts of past years also show that the receipts from this branch of the Trusts' revenue have uniformly been in excess of the expenditure. Port dues are at present charged at the minimum rate allowed by law, viz., 2 annas per ton. The receipts from this source alone are estimated at Rs. 2,05,000 for the year, and it is recommended that the rate be reduced by 25 per cent., or to 1½ annas per ton. This will benefit the shipping to the extent of Rs. 51,250 per annum. In order to enable this reduction to be made, the Indian Ports Act will have to be amended, but to this it is not expected that Government will raise any objection.

After allotting Rs. 1,00,000 to the Sinking Fund and reducing the Port dues as above, there remains an apparent balance of Rs. 83,000,

of which, seeing that Estimates only are being dealt with, it is not proposed at the present time to make any appropriation.

Turning to the details of the Estimates it will be observed that it is proposed to spend Rs. 60,000 in widening the Dock Channel, and Rs. 19,000 in Lighting the Dock entrances and erecting a Tide Gauge Tower. These are capital charges. The Trustees already have permission from Government to borrow 12 lakhs of rupees to complete the Dock works, but the unexpected increase of revenue during the past 2 years has enabled the Trustees to meet all charges against capital account without resorting to a loan. The power to borrow, however, still remains whenever it may be necessary to use it.

None of the other new works are heavy. They are detailed in the Estimates, and aggregate Rs. 1,08,241. For such of the items as are not a fair charge against revenue, the Sinking Fund will be availed of.

The Revenue under the head of Bunder Properties is put down at Rs. 20,37,000. The actual receipts during 1882 have been Rs. 21,27,619, and in fixing a lower sum for the ensuing year regard has been had to the following considerations :—

1. That the Wharfage rates were higher during the first 3 months of 1882 than now.
2. That the revenue derived from the Egyptian Expedition during 1882 was unusual.
3. That the quantity of coal stored on the Bunders is not likely to be so large next year as it was during 1882.
4. That some Rs. 15,000 of arrears of ground rent were recovered in 1882.

On the other hand, allowance has been made for the natural growth of the rents from leased land.

The Dock revenue is estimated at Rs. 8,38,000, as compared with actual receipts for 1882, amounting to Rs. 9,77,679. The Dock receipts were increased to a much greater extent than the Bunders' by the despatch and return of the Egyptian Expeditionary Force. Also higher export rates on grain and seed were charged in January-March 1882 than are now in force. These seem sufficient reasons to give for the reduced estimate.

A considerable increase—from Rs. 65,827, which was the amount received in 1882, to Rs. 75,000—is allowed for the Dock Warehouses, several large constituents having recently transferred their business to these warehouses.

The "Port Fund" and "Pilotage" receipts are based upon the revenue of 1882 and require no remark.

With regard to Expenditure, the establishments on Bunder Properties are slightly in excess of last year. The property of the Trust has of late years been added to so largely that time has been needed to find out the requirements of the different departments. The Special Committee of Trustees, which has recently been appointed, will, however, now be able to fix permanently the maximum and minimum pay of most of the appointments under the Trust, and this

will prevent any violent fluctuations under the head of "Establishments."

The cost of repairs to and maintenance of Bunder Properties is given very much in detail at pages 23-26 of the Estimates. It will be observed that it is proposed to spend Rs. 5,000 in dredging Sassoon Dock. The cost of scavenging at the Elphinstone and Mody Bay Estates alone is put down at Rs. 18,100, and of repairing roads and drains on Elphinstone Estate at Rs. 20,760. These are works which ought to be taken over by the Municipality at an early date—when expenditure under these heads will cease.

Municipal taxes are estimated at Rs. 65,000—the same as last year. The existing arrangement under which the Trust Estate is taxed by the Municipality comes to an end on 25th June next, and a fresh arrangement, so far as the amount to be paid is concerned, will then have to be made. It is not yet settled what amount the Municipality will claim, and it does not, therefore, appear to be necessary for the Trustees in the meantime to do more than to provide for payment of the existing allowance, besides making provision for repairing and cleaning roads.

The usual allotment of Rs. 20,000 for Contingent works is made.

The Dock expenditure is estimated at Rs. 6,06,700 against an actual expenditure of Rs. 5,44,550 during 1882. Permanent establishment has been provided for a greater number of sheds, and the allowance for dredging the channel and dock has also been increased.

In the Dock Warehouses an increase has been made to the expenditure, but only such as is necessitated by the expected increase in the quantity of goods to be handled.

A contribution of Rs. 20,000 to the Provident Fund has been allowed for. The Act authorising the formation of the Fund has been passed by the Bombay Legislative Council, and it will no doubt speedily receive the sanction of H. E. the Viceroy. The rules allow officers either to pay up their contribution from 1873 till the present time, in a lump sum, or to spread the payments over a series of years. As the Trust has to make its contribution at the same time as the officers, it will not be possible for the first year or two after the Fund is started to estimate the expenditure closely.

It will be observed that provision is made for continuing the payment of interest on the original debt of the Trust for the entire year at 4 per cent. although the Act provides that the rate shall be increased to $4\frac{1}{2}$ per cent. from 25th June next. As the Trustees are aware, strong representations have been made to Government with a view to the lower rate being continued for some time longer, and these it is hoped will be successful.

The estimated expenditure on the Port and Pilotage Departments is based very much on the receipts of the past year, and there is no divergence of sufficient magnitude to call for remark.

G. MEREWETHER Lieut.-Colonel, R.E.,
Chairman,

Bombay, 10th February, 1883.

SUMMARY.

*ESTIMATE of REVENUE and EXPENDITURE for the year ending
31st March 1884.*

Actuals from 1st Jan. to 31st Dec. 1882.	Estimates for 1883-84.	REVENUE.			
Rs.	Rs.				Rs.
21,27,620	19,60,000	Bunder Properties, including land	...	...	20,37,000
9,77,680	7,57,000	Prince's Dock	...	...	8,38,000
10,560	11,200	Railway Contract Department	...	...	11,500
65,827	66,000	Warehouses, Prince's Dock	...	...	75,000
6,473	6,000	Miscellaneous Revenue	...	...	6,400
2,74,744	2,51,800	Port Fund Account	...	2,69,100	
1,72,456	1,70,000	Pilotage	...	1,70,000	
					4,39,100
36,35,360	32,22,000				Rs. 34,07,000
		EXPENDITURE.			
3,47,218	3,60,000	Bunder Properties	...	...	3,59,300
5,44,550	5,19,900	Prince's Dock	...	...	6,06,700
6,378	8,600	Railway Contract Department	...	...	9,100
15,913	16,000	Warehouses, Prince's Dock	...	...	21,000
1,35,032	1,34,900	Rents	...	...	1,34,900
1,04,483	1,11,340	General Charges	...	...	1,26,350
15,37,570	15,75,260	Interest	...	...	15,55,260
1,63,400	1,22,000	Port Fund Account	...	1,31,640	
1,56,918	1,70,000	Pilotage	...	1,70,000	
					3,04,640
					31,17,250
		New Works	...	...	55,850
30,11,467	30,18,000				Rs. 31,73,100

BOMBAY, 17th February, 1883.

JOHN GORDON, Esq., Secretary Chamber of Commerce.

DEAR SIR,—I have the pleasure to hand you herewith the Budget Estimate of the Bombay Port Trust for the year 1883-84, from which you will observe that the revenue is expected to exceed the expenditure by about Rs. 2,30,000. One lakh of that amount will be applied towards the Sinking Fund, and it has been suggested that part of the remainder (about half a lakh) should be applied in reducing the port dues on shipping.

Will you have the goodness to lay the Budget and the Chairman's Memorandum before the Committee, and favour me, at you early convenience, with an expression of their opinion as to whether they think this appropriation desirable, or, if, instead, they would recommend the application of the amount towards reducing the rates charged on any article or articles of export or import.

The Budget will come on for final disposal at the Trustees' Meeting on 27th inst., before which date I shall hope to hear from you.—I, am,
&c.,

W. M. MACAULAY

BOMBAY CHAMBER OF COMMERCE, 27th February, 1883.

The Hon'ble W. M. MACAULAY, Bombay.

DEAR SIR,—I have submitted to the Committee of the Chamber your letter of the 17th instant, together with the Budget Estimate of the Port Trust for the year 1883-84, and the Chairman's Memorandum on the Budget Estimates, which accompanied it. These estimates show that the revenue is expected to exceed the expenditure by about Rs. 230,000, of which one lac will be applied towards the Sinking Fund, and it is suggested that about half-a-lac of the remainder should be applied in reducing the port dues on shipping.

The Committee, having carefully considered the question whether they think this appropriation desirable, or whether they would, instead, recommend the application of the amount towards reducing the rates on any article or articles of export or import, are of opinion that the proposal to apply part of the surplus towards reducing the port dues on shipping from 2 annas to 1½ annas per ton is desirable, but they at the same time strongly recommend that these dues should be reduced to one anna per ton now, if possible, or as soon hereafter as may be considered practicable.—I remain, &c.,

J. GORDON, Secretary.

No. 75.

BOMBAY PORT TRUST, SECRETARY'S OFFICE,
ELPHINSTONE CIRCLE, BOMBAY, 27th February, 1883.

Excerpt from the Proceedings of a Meeting of the Trustees of the Port of Bombay, held on the 27th February.

Submitted estimates of receipts and expenditure for the year 1883-84, copy of which was furnished to each Trustee on 15th instant.

The Hon'ble Mr. Macaulay handed in a letter addressed to him by the Secretary to the Chamber of Commerce, dated 27th instant, intimating that the Committee, having carefully considered the question, are of opinion that it is desirable to apply part of the estimated surplus towards reducing the port dues on shipping from 2 to 1½ annas per ton rather than to apply it towards reducing the rates on any article or articles of import or export; but they at the same time strongly recommend that the port dues be reduced to 1 anna per ton now if possible, or as soon hereafter as may be considered practicable.

The Chairman asked, and obtained leave, to make the following alterations in the Budget:—Under the head of expenditure "Steam Launch Minnie" page 9, the item Rs. 500 which had been slipped in by a typographical error to be struck out, making the total amount for the Launch Rs. 2,£16 instead of Rs. 3,016. Under the head of Engineering Establishment, page 16:—"Provision for temporary assistance" Rs. 5,000 to be struck out; any extra assistance required by

the Resident Engineer to be brought up specially for sanction. Under the head of "Dock Staff," page 27, the number of peons to assist import and export Gate-keepers to be 8 instead of 6, the amount to be Rs. 80 instead of Rs. 60 per mensem. The Chairman mentioned that these men had been sanctioned during the current year, subsequently to the passing of the Budget.

Mr. Parker proposed that the provision made for cots for Lascars in the Port Officer's Department be disallowed.

Captain Brent proposed as an amendment that the amount be allowed to stand. The amendment was first put and was carried, and it was afterwards carried as a substantive motion.

75. With these alterations the Budget was sanctioned as were the recommendations contained in the Chairman's Memorandum.

[True Excerpt]

G. MANSON, Secretary.

APPENDIX S.

THE RATE OF INTEREST PAYABLE BY GOVERNMENT ON THE PORT TRUST DEBT.

No. 347.

BOMBAY PORT TRUST, SECRETARY'S OFFICE,
ELPHINSTONE CIRCLE, BOMBAY, 6th February, 1883.

To the SECRETARY CHAMBER of COMMERCE, Bombay.

SIR,—As requested in your letter dated 26th January, I am directed to forward here-
Letter to Government, No. 3397, dated 3rd November, 1882. with copy of correspondence noted in
Accountant General's report, No. A. C. of 1882-83, dated 9th December, 1882, with its accompaniments.
Letter to Government, No. 111, dated 13th January, 1883.
Government Resolution, Marine Department, No. 25, dated 20th January, 1883.
the margin.—I have, &c.,

G. MANSON, Secretary.

No. 3397
8-11-82.

3rd November, 1882.

The SECRETARY to GOVERNMENT, Marine Department.

SIR,—I am directed to acknowledge receipt of G. R. No. 400, dated 22nd August, intimating that the Government of India do not purpose taking any further action in connection with the proposal of a Government Guarantee of certain debentures of the Bombay Port Trust.

2. The scheme, as proposed by the Trustees, for relieving their revenues to the extent of Rs. 1,43,000 per annum has thus, notwithstanding that it had the full approval of the Governments of

Bombay and of India, come to nought by reason of objections raised by the Secretary of State.

3. The Trustees are, however, not without hope that Government will in another way aid them in their endeavour to grant relief to the over-burdened trade of this port.

4. When the Trust was formed the interest upon Rs. 2,11,70,754 of its debt was fixed at 4 per cent. for the first ten years, and $4\frac{1}{2}$ per cent. thereafter. In making this arrangement, the Government of India wrote (see para. 38 of Mr. Secretary Chapman's letter No. 3372, dated 8th September, 1871) :—" This concession is of nearly equal value to that which is asked for (by the Government of Bombay), and it may be hoped that ten years hence the revenues of the Trust may admit of the slight additional burden that will then fall upon them."

5. The interest at $\frac{1}{2}$ per cent. upon 211 lakhs, which (using round numbers) is the amount at which this original debt now stands, is Rs. 1,05,500, and, according to the arrangement made between the Government of India and of Bombay *before* the formation of the Port Trust, this considerable sum will form an additional charge upon the trade of the port from 26th June next.

6. The Trustees do not mean to say that it will not be possible for them to raise revenue sufficient to meet this increased charge. The position of the Trust is greatly changed from what it was ten years ago. By placing them in possession of the whole of the foreshore, Government has made it possible for the Trustees to tax the trade of the port to a practically unlimited extent. The Trustees are prepared to admit that many benefits have accrued from the transfer to the Trust of the whole foreshore of the island, but, on the other hand, the absence of competition which the existing monopoly involves, coupled with the fact that the Trust is bound to raise interest at 4 per cent. upon the purchase price of the foreshore properties while the former owners had to accept whatever interest upon their capital they could earn—these facts have undoubtedly prevented merchants from obtaining many reductions in rates which they could formerly command. Moreover, the surplus which the Trustees earned last year was due in great measure to the large trade in wheat—a trade which subsequent experience has proved to be a precarious one to rely on, for, owing, amongst other causes, to abundant harvests in England and America, the exports during the past few months have been greatly reduced.

7. It is not however, as already explained, because of their inability to raise the larger amount that will be needed after June next, but rather because the interests of trade demand that the charges levied by the Trustees be reduced to the lowest possible limit, that I am now directed to request that Government will be pleased to continue to charge 4 per cent. on the debt of the Trust *after* 26th June next.

8. On looking at recent correspondence the Trustees find their case in reference to their original debt, very ably argued by the Hon'ble Mr. Hope in his letter of 19th January, 1882, communicated with

Government Resolution No. 49 of 26th idem, and I am to draw the attention of Government to the following extracts from the letter in question. In para. 4 the Hon'ble Mr. Hope states that "the case of the existing debt is quite peculiar. It arose out of transactions of the Government in connection with the Elphinstone property, *the Government is responsible for the creation of the debt on the large scale on which it exists.* And it has on the one hand virtually guaranteed and on the other reserved the power of enforcing its own claim for interest. *The Government is at the same time bound to give every facility for lightening the burden on trade originated by its own transactions,*—para. 5. The financial effect of the present sanction will be that Government will lose $\frac{1}{2}$ per cent. on 76 lakhs, and eventually, *i.e., from June 1883, $\frac{1}{2}$ per cent. on the debts mentioned in Schedule C of the Port Trust Act if the Trustees succeed in raising a loan having the Government Guarantee for the conversion of the debt. But, on the other hand, the trade of Bombay will be relieved of a charge to the same amount, and as the Governor-General in Council does not think it just that the general revenues should benefit from charges on the local trade unduly heavy and in excess of the market rate of interest, His Excellency in Council considers that this sacrifice of revenue may properly be accepted."*

9. The Trustees would draw particular attention to the passages underlined, and which lead them to expect that Government will be prepared to consider favourably the request now made.

10. The Trustees have strong hopes that even without a guarantee they will be able ere very long to place their 4 per cent. debentures on the London market at par. And it may be, therefore, that the reasonable concession now asked for may either never be required, or may be taken advantage of for only a short period. But it will be necessary for the Trustees to undertake the preparation of their budget for the forthcoming year early in January, and, unless they have the sanction of Government to a continuance of the rate of interest at 4 per cent., it will behove them to make provision for the enhanced rate, and this will either necessitate their maintaining existing rates, or, in the event of their revenue for the current year being very favourable, will prevent them from granting such a remission of taxation as the necessities of trade and the just expectations of merchants demand.

11. In this connection I am desired to remind Government of the unfavourable position in which Bombay is placed as compared with Calcutta. Setting on one side the fact that Bombay does not yet derive that advantage in railway rates which her comparative proximity to the North-West Provinces should entitle her to, and to which the Trustees can only incidentally refer, there remains the further fact that the Bombay Port Trust is weighted with a capital debt nearly five times as large as that which the sister institution at Calcutta has to bear. As has often been pointed out, and as the Hon'ble Mr. Hope admits in his letter above quoted—the Government, and *not* the trade as represented by the Trust, "is responsible for the debt on the large scale on which it exists," and the Trustees, therefore, in asking the concession applied for in para. 7 of this letter—

a concession which it is possible may not even have to be availed of, have every confidence that Government will be able to meet their views.—I have, &c.,

G. MANSON, Secy. Bombay Port Trust.

No. $\frac{98}{P.T.}$

MARINE DEPARTMENT
BOMBAY CASTLE, 10th November, 1882.

Referred to the Accountant General for favour of any remarks he may wish to offer on the proposal contained in para. 7 of the letter.

B. H. POTTINGER, Colonel,
Officiating Secretary to Government.

No. $\frac{A C}{15066}$ OF 1882-83.

ACCOUNT CURRENT DEPARTMENT,
BOMBAY, 9th December, 1882.

The present arrangement with the Bombay Port Trust both as regards the capital debt and the interest payable to Government, is the result of very protracted discussion, and it appears to the undersigned improbable that the Government of India would, at this distance of time, re-open the question unless very strong grounds are brought forward for doing so.

2. The particular sum now under discussion was advanced by Government and was provided by the issue of a loan at 93 or at a cost to Government for interest of 4·3 per cent. in addition to the charges of management. It was at first agreed that the Port Trust should pay 4½ per cent., but, after considering an application that the Trust should reimburse Government for the exact cost (less expenses of management) or 4·3 per cent., the Government of India finally consented to accept 4 per cent. for ten years, and, afterwards, when it was expected that the Trust would be in a more prosperous condition, 4½ per cent.

3. Thus for the past ten years Government has been annually a loser of ·3 per cent. besides expenses on this loan to the Port Trust,

and it is now proposed that Government shall continue to bear this loss indefinitely.

4. The arguments in support of such a proposition appear to be entirely of a general character. It is not denied that, as was expected, the Port Trust is well able to pay the larger sum, but it is said that "the interests of trade demand that the charges levied by the Trustees be reduced to the lowest possible limit," that the trade of this port is "overburdened," that it has suffered from the absence of competition caused by the monopoly of the Port Trust, and the necessity of paying 4 per cent. interest on the capital expended—that the surplus earned last year was due in great measure to the large trade in wheat, which is of a precarious character.

5. It would seem desirable to examine these statements a little more closely.

6. From the appended statement prepared from the best materials available in this office, it appears that during the last ten years the value of trade in Bombay has increased by 20 crores or nearly 40 per cent., and the tonnage by 24,00,000 tons, or more than 120 per cent. In 1871 "it was stated, not

Government of India, Financial Department, to Govt. of Bombay, P. W. Department, 3372, 8th September, 1871.

long ago, by the Liverpool Shipowners' Association that the average disbursements of a ship at Calcutta may be estimated at 22s. 6d. to 25s. per ton register, while those at Bombay may be put down at 10s." It seems hardly likely that the monopoly of the Port Trust, which the Trustees are evidently anxious to use for the benefit and not the oppression of trade, can have so altered the state of things, that the trade of Bombay is now exceptionally overburdened, nor does the great expansion of the trade bear out such an assumption. It is obvious that in all ports trade has to bear in some way interest or dividend on capital expended for its accommodation, and 4 or 4½ per cent. cannot be regarded as excessive or greater than the fair expectation from any scheme whether in the hands of the public body or a private company.

7. Regarding the statement that the surplus of last year was due in great measure to the large trade in wheat, it is satisfactory to see from the Administration Report that, though important, it is not the most important item—the Trustees in their report attribute more than 6 lakhs to the Prince's Dock and only Rs. 3,65,377 to the large export of seed and grain, and it may be hoped that the Dock earnings are not of specially precarious character.

8. The Trustees (para. 10) express a hope that without any Government guarantee they may be able ere long to place 4 per cent. debentures on the London market at par, and thus, it is presumed, pay off the debt to Government. Government would doubtless gladly welcome such a repayment, accepting the loss which has accrued on the loan for the past ten years, but it should be noted that for Government now to reduce permanently the rate of interest to 4 per cent. would remove all incentive to such an operation on the part of the Trust—indeed as the Trust will have to bear expenses of management

for any debentures, it may-place in the open market such debenture would be more costly than a 4 per cent. Government loan.

9. The undersigned is therefore unable to recommend the application of the Trustees in their 7th paragraph to their favourable consideration of Government.

E. GAY, Accountant General.

Value and Tonnage of Sea borne Trade of

		IMPORTS.					Total of each Year.
		BY MERCHANTS.		BY GOVERNMENT.		TOTAL.	
		Merchan- dise.	Treasure.	Stores.	Treasure		
Foreign	1871-72.	10,42,19,610	6,84,30,485	37,07,973		17,26,50,095	27,19,93,369
Coasting		4,39,74,162	4,58,504	....	....	37,07,973	
"		5,07,16,782	8,44,768	....	....	4,44,32,666	
"				1,40,134	25,00,000	5,15,61,500	
Foreign	1872-73.	10,21,78,930	2,78,04,745	33,76,115		12,99,83,675	21,13,61,084
Coasting		3,96,27,847	8,80,191	....	....	33,76,115	
"		3,96,77,856	8,93,697	21,700	....	4,05,08,041	
"						21,700	
Foreign	1873-74.	11,32,60,842	3,39,08,555	1,07,38,431		14,71,69,397	23,45,82,282
Coasting		7,48,68,084	17,43,796	....	....	1,07,38,431	
" ....		....	....	62,574	....	7,66,11,880	
Foreign	1874-75.	11,50,98,156	4,09,51,654	41,58,080		16,20,52,810	24,01,13,096
Coasting		8,12,69,695	11,32,511	....	....	41,58,080	
" ....		....	....	....	8,00,000	8,24,02,266	
Foreign	1875-76.	13,47,24,382	3,69,90,576	47,60,748		17,07,14,958	25,53,90,466
Coasting		7,86,96,695	12,17,865	200	....	47,60,748	
" ....		....	....	....	....	7,99,14,560	
Foreign	1876-77.	12,74,15,075	8,29,61,682	57,62,569	17	21,03,76,657	29,83,23,513
Coasting		7,78,51,110	21,75,818	20,710	21,36,632	57,62,569	
" ....		....	....	....	....	8,00,26,928	
Foreign	1877-78.	14,07,05,337	11,95,97,164	95,86,024		26,03,02,501	36,17,57,469
Coasting		8,31,48,210	61,93,103	1,21,156	24,06,475	95,86,024	
" ....		....	....	....	....	8,93,41,313	
Foreign	1878-79.	13,47,86,920	4,85,74,636	57,11,015		18,33,61,556	26,71,88,067
Coasting		7,06,00,486	66,44,164	35,315	18,35,531	57,11,015	
" ....		....	....	....	....	7,62,44,650	
Foreign	1879-80.	14,11,13,815	8,02,58,487	62,46,745		18,70,816	32,11,48,644
Coasting		8,91,32,158	31,10,083	53,171	12,34,185	22,13,72,302	
" ....		....	....	....	....	62,46,745	
Foreign	1880-81.	19,27,07,737	6,71,01,395	64,69,277		9,22,42,211	35,49,76,301
Coasting		8,68,17,323	7,58,300	4,32,782	6,89,482	12,87,356	
" ....		....	....	....	....	25,98,09,132	
Foreign	1881-82.	18,13,72,652	9,01,51,055	43,99,312		64,69,277	38,50,83,192
Coasting		9,72,93,538	17,12,939	14,26,516	87,27,180	43,99,312	
" ....		....	....	....	....	9,90,06,477	
						1,03,53,696	

the Port of Bombay from 1871-72 to 1881-82.

EXPORTS.

BY MERCHANTS.		BY GOVERNMENT.		TOTAL.	Total of each Year.	Total of Imports and Exports.	Tonnage of Imports and Exports.
Merchan- dise.	Treasure.	Stores.	Treasure.				
24,12,11,030	89,50,282			25,01,61,362	30,87,67,687	58,37,60,055	19,29,717
2,72,97,350	53,89,487	28,845	4,94,200	5,23,045			
1,87,71,814	62,83,251	..	..	3,26,80,837			
....	....	41,378	3,00,000	2,50,55,065			
19,75,34,858	95,95,610			3,41,378	26,54,84,771	47,98,45,855	18,47,667
2,83,00,326	70,69,844	39,679	2,20,000	20,71,30,468			
1,64,78,912	60,61,772	39,740	1,44,000	2,59,679			
20,67,74,348	79,22,574	..	..	3,53,70,170			
4,42,55,977	76,11,753	1,85,326	3,10,000	1,83,740	26,92,20,440	50,38,02,722	27,21,785
....	....	63,462	20,97,000	2,25,40,714			
23,40,55,883	56,60,864			21,46,96,922			
4,41,82,431	98,26,169	68,461	3,15,877	4,65,326			
....		96,094	78,47,100	5,18,67,730	30,20,52,879	55,14,65,975	29,01,947
21,36,08,886	1,07,89,119			21,60,462			
4,78,62,097	1,01,55,332	1,09,470	7,90,000	23,97,16,747			
....	....	2,85,676	7,22,500	3,84,338			
22,41,49,598	3,25,06,758			5,40,08,600	33,11,04,058	62,94,27,571	34,61,378
6,12,56,921	91,44,984	91,574	8,24,000	79,43,194			
22,09,48,013	1,78,10,039	7,34,923	23,95,300	22,43,98,005			
6,96,31,487	44,54,005			8,99,470			
18,93,65,443	3,07,97,155	1,13,130	4,60,000	5,80,17,429	31,58,53,438	67,76,10,907	38,53,588
6,53,33,801	56,59,378	8,73,764	15,63,000	10,08,176			
22,55,31,607	1,29,88,488			25,66,56,356			
6,50,72,665	61,78,151	2,40,729	5,23,080	9,15,574			
26,50,26,588	88,04,374	10,22,817	40,60,000	7,04,01,905	29,09,92,406	56,41,80,473	35,85,850
6,79,05,038	66,06,700			31,30,223			
31,67,67,778	56,97,613	91,219	7,70,000	23,87,58,052			
6,31,35,115	73,30,725	11,77,026	1,00,60,000	5,73,130			
....				7,40,85,492	32,18,69,156	64,30,17,800	34,35,251
26,50,26,588	88,04,374	83,073	2,66,000	24,36,764			
6,79,05,038	66,06,700			22,01,62,598			
31,67,67,778	56,97,613			7,63,809			
....				3,49,073	36,19,73,867	71,69,50,168	39,73,315
26,50,26,588	88,04,374			7,12,50,816			
6,79,05,038	66,06,700			1,12,37,026			
31,67,67,778	56,97,613			27,47,30,962			
....				3,49,073	39,56,09,335	78,06,92,527	42,79,917
26,50,26,588	88,04,374			7,45,11,738			
6,79,05,038	66,06,700			1,23,82,094			
31,67,67,778	56,97,613			32,24,65,391			
....				94,204			
26,50,26,588	88,04,374			7,04,65,810			
6,79,05,038	66,06,700			25,83,900			

(Signed) E. GAY, Accountant General.

No. $\frac{30}{A. G.}$

MARINE DEPARTMENT,
BOMBAY CASTLE, 13th December, 1882.

Referred to the Chairman, Bombay Port Trust, for the favour of any remarks he may wish to offer.

B. H. POTTINGER, Colonel,
For Secretary to Government.

No. 111.

BOMBAY PORT TRUST, SECRETARY'S OFFICE,
ELPHINSTONE CIRCLE, BOMBAY, 13th January, 1883.

To the SECRETARY to GOVERNMENT, Marine Department.

SIR,—I am directed to return herewith the papers forwarded with your No. $\frac{30}{A. G.}$, dated 13th ultimo, with the following comments.

The Accountant General in his No. $\frac{A. C.}{15066}$, dated 9th ultimo, considers it improbable that the Government of India will reopen the question of the rate of interest to be paid by the Trust on the Government debt unless very strong grounds are brought forward for doing so, and he endeavours to show that the reasons brought forward by the Trustees ought to carry no weight.

With regard to the 2nd and 3rd paras. of his letter, it is only necessary to remark that the Government of India were presumably in possession of the facts therein mentioned, when in the Hon'ble Mr. Hope's letter, referred to in my No. 3397, dated 3rd November, they so warmly advocated the granting of a Government guarantee to enable the Trust to raise money at 4 per cent. in order to pay off this very debt. It is the Hon'ble Mr. Hope's arguments that the Trustees have used and there is no reason to suppose that these would carry less weight now than they did last year. The Trustees would therefore beg that Government will submit their letter of 3rd November for the favourable consideration of the Government of India, and they hope that a broad and liberal view will be taken of the question submitted.

It may be well for the satisfaction of Government that the Trustees follow the Accountant-General through the various arguments he uses, so that no undue value may be attached to them.

The Trustees are not concerned to deny that the volume of trade passing through Bombay has materially increased within the past ten years—with the expansion of railways and the opening up of communications in the interior generally—it would be strange if this were not so, or if the Trustees' charges for the use of dock or wharf had been able to prevent it. It will be apparent to Government that although trade increases at a port, still that trade may be overburdened in respect of some of the charges

which it has to bear, and in using the language referred to by the Accountant-General, the Trustees only could have reference to their own share in adding to the charges. The Accountant-General seeks by quoting from a letter dated 8th September, 1871, referring to a time even previous to that, to show that trade at Bombay has lighter burdens to bear than at Calcutta. The Trustees have at hand for reference the scale of charges, now levied at Calcutta, and the following comparison will place the question in a fairer light before Government than the reference to old correspondence made by the Accountant-General.

Amongst the principal imports at Bombay are—

	Calcutta rate.	Bombay rate.
	Rs. a. p.	Rs. a. p.
Piece-Goods	0 4 0	0 6 0 per bale.
Iron	1 0 0	1 4 0 per ton.
Wines	0 1 6	0 2 0 per dozen.

Cotton and seeds are admittedly the exports on which Bombay chiefly depends, and they too are charged more at Bombay than at Calcutta thus :—

	Calcutta.	Bombay.
	Rs. a. p.	Rs. a. p.
Cotton	0 2 0	0 2 6 per bale.
Seeds	0 13 6	0 14 0 per ton.

At the time when the Liverpool Shipowners' Association made the statement quoted by the Accountant-General, port dues on vessels at Calcutta were levied at the rate of 4 annas per ton, while they have now been reduced to 1 anna per ton—against 2 annas at Bombay.

The Pilotage charge at Calcutta is necessarily higher than at Bombay, seeing that there is 120 miles of a river to pilot up against the open roadstead of Bombay, but the rates are not quoted in the same way, so that a comparison cannot readily be made. But in any argument based on the expenses of a Port weight must be given to all the circumstances. At Calcutta, for example, there is the intricate river navigation to contend with, but behind Calcutta there is an open country through which railways can be, and have been, made and worked at much less cost than from Bombay, behind which rise up the Western Ghats. Railway charges on goods per mile carried are therefore higher than at Calcutta.

The Accountant-General goes on to state that in all ports "Trade has to bear in some way interest or dividend on a capital expended for its accommodation, and 4 or 4½ per cent. cannot be regarded as excessive or greater than the fair expectation from any scheme whether in the hands of a public body or a private company."

In regard to this, Government are aware that the Trustees have not objected to pay interest at 4 per cent. ; they consider that rate perfectly fair. Nor had the trade of the port made the bargain which the Accountant-General desires Government to hold them to could they have objected to the higher rate of 4½ per cent. But as has been often before remarked and as has been strongly expressed by the Hon'ble Mr. Hope, the debt of the Trust was incurred by Government, without the least reference to the trade, so that it appears

only reasonable to the Trustees at this period to make the representation contained in my No. 3397 of 3rd November.

It would appear from the 7th para. of the Accountant-General's letter that he has not followed with sufficient closeness the figures quoted in the Trustees' last Administration Report. It is therein stated that the increased revenue from the Elphinstone Estate, *exclusive of dock dues*, amounted to Rs. 3,65,377, and that this increase was mainly due to the very large exports of grain and seeds. The dock charges on the grain and seeds exported from the Dock will be found at page 104 of the Report to be Rs. 2,46,641 in excess of the previous year, and these dock receipts were not included in the Rs. 3,65,377 above quoted.

With regard to the remark in the 8th para. of the Accountant-General's letter that to grant Trustees' request would remove all incentive to their raising a loan in the open market in order to pay off Government, I am to observe that it would at any time, after June next, be legally open to Government to intimate that the rate of $4\frac{1}{2}$ per cent. would be insisted on, so that Government could fully control the action of the Trustees in the matter. But in order to remove this objection altogether, I am to state that should Government prefer to fix the reduced rate of 4 per cent. for a definite time, the Trustees would suggest that rate being continued for, say, ten years from June next.—I have, &c.,

G. MANSON, Secretary.

No. 25

MARINE DEPARTMENT,
BOMBAY CASTLE, 20th January, 1883.

Letter from the Secretary, Bombay Port Trust, No. 3397, dated 3rd November 1882.

Referring to Government Resolution No. 400, dated 22nd August last, intimating that the Government of India do not purpose taking any further action in connection with the proposal of a Government guarantee of certain debentures of the Bombay Port Trust, states that when the Trust was formed the interest upon Rs. 2,11,70,754 of its debt was fixed at 4 per cent. for the first ten years, and $4\frac{1}{2}$ per cent. thereafter. In making this arrangement the Government of India wrote (para. 38 of Mr. Secretary Chapman's letter No. 3372, dated 8th September 1871)—“This concession is of nearly equal value to that which is asked for (by this Government) and it may be hoped that ten years hence, the revenues of the Trust may admit of the slight additional burden that will then fall upon them.” Offers certain other observations, and adds that it is not because of the Trustees' inability to raise the larger amount that will be needed after June next, but rather because the interests of trade demand that the charges levied by the Trustees be reduced to the lowest possible limit. Requests that Government will be pleased to con-

tinue to charge 4 per cent. on the debt of Trust after 26th June next for a further period of ten years.

Report by the Accountant-General, No. A.C.—15,066, dated 9th December 1882.

Letter from the Secretary, Bombay Port Trust, No. 111, dated 13th January 1883.

RESOLUTION.—When the Port Trust was formed the interest upon Rs. 2,11,70,754 of its debt was fixed at 4 per cent. for the first 10 years, and 4½ per cent. thereafter. This increase, if insisted on, will take effect from the 25th June next.

2. The Trustees, however, solicit the concession that the lesser rate of interest may continue to be charged after that date, not because of their inability to raise the larger amount of loan that will be needed after June next, but rather because the interests of trade demand that the charges levied by the Trustees be reduced to the lowest possible limit, and in the 5th para. of their letter No. 111, dated 13th instant, they quote instances to show how the trade is in some respects overburdened at present.

3. In support of their application the Trustees quote the following passages from a letter from the Hon'ble Mr. Hope, Financial Secretary to the Government of India, No. 391, dated 19th January 1882 :—

“4. The case of this existing debt is quite peculiar. It arose out of transactions by the Government in connection with the Elphinstone property, *the Government is responsible for the creation of the debt on the large scale on which it exists*, and it has on the one hand virtually guaranteed, and on the other reserved the power of enforcing its own claim for interest. *The Government is at the same time bound to give every facility for lightening the burden on trade originated by its own transactions.*

“5. The financial effect of the present sanction will be that Government will lose half per cent. on seventy-six lacs, and eventually, i.e., from June 1883, half per cent. on the debts mentioned in Schedule C of the Port Trust Act, if the Trustees succeed in raising a loan having the Government guarantee for the conversion of the debt. *But on the other hand the trade of Bombay will be relieved of a charge to the same amount, and as the Governor-General in Council does not think it just that the general revenues should benefit from charges on the local trade unduly heavy, and in excess of the market rate of interest, His Excellency in Council considers that this sacrifice of revenue may properly be accepted.*”

and invite special attention to the parts underlined.

4. The Trustees further suggest that if Government should prefer to fix the reduced rate of 4 per cent. for a definite time, that rate may be continued for, say 10 years, from June next.

5. On the grounds above stated, the application will be forwarded to the Government of India for favourable consideration.

B. H. POTTINGER, Colonel,
For Secretary to Government.

No. 803.

BOMBAY PORT TRUST, SECRETARY'S OFFICE,
ELPHINSTONE CIRCLE, BOMBAY, 21st March, 1883.

To JOHN GORDON, Esq., Secretary Chamber of Commerce.

SIR,—I am directed to forward herewith, for the information of the Chamber, copy of Government Resolution No. 109, dated 13th March, declining to postpone for ten years, from June next, the enhanced rate of interest, viz. 4½ per cent. per annum on the original debt of the Trust.—I have, &c.,

G. MANSON, Secretary.

No. 109.

MARINE DEPARTMENT,
BOMBAY CASTLE, 30th March, 1883.

Letter from D. BARBOUR, Esq., Secretary to the Government of India, Department of Finance and Commerce, No. 991, dated 22nd February 1883.

"I am directed to acknowledge the receipt of Colonel Pottinger's letter No. 25, dated the 20th January last, submitting, for the favorable consideration of the Government of India, an application from the Trustees of the Port of Bombay for the continuance for a further period of ten years of the rate of 4 per cent., which they now pay on account of interest on their debts to Government.

"2. This application is made not because of the inability of the Trustees to pay the additional ½ per cent. which will be leviable on the debt after June next, but on the following grounds :—

(1)—that the continuance of the lower rate will enable them to make a reduction in rates for landing and shipping goods, such reduction being required on the general ground that it is inexpedient to burden trade unnecessarily, and also because Bombay trade is weighted by heavier rates than prevail in Calcutta ;

(2)—that the debt was incurred by Government and not by any action of the Trustees who were loaded with it on the formation of the Board ;

(3)—that this has been clearly and distinctly admitted by Government in its letter of 19th January last, and that the Government, when that letter was written, was willing to dispense with the increased rate of interest.

"3. The Governor-General in Council does not consider it necessary to enter on any discussion of the second of these arguments though he is not prepared to admit the contention of the Trustees. Nor does he propose to follow the Trustees into their comparison of the charges on trade in Calcutta and Bombay respectively. To be useful such a comparison should be carried much further, and, if extended, His Excellency in Council is of opinion that the comparison would probably show that the trade of Calcutta is on the whole more heavily weighted than that of Bombay. There is no occasion, however, to enter upon such questions in dealing with this application. The Trustees' proposal should be decided simply with reference to the

effect of the enhancement of the rate of interest on the trade of Bombay.

"4. As stated in the 2nd paragraph above, the Trustees do not urge that the trade of Bombay cannot bear the increased charge. No such contention could in fact be reasonably made in face of the facts that there is a gratifying yearly increase in the trade of the port, and that its finances are flourishing. The Trust indeed is now in a far better financial position than was anticipated when the present

* Letter No. 179-A., dated 21st October 1871.

arrangement was made after protracted negotiation and accepted by the Government of *Bombay on behalf of the Trust 'with much satisfaction.' This being the case, the Governor-General in Council is unable to admit that there are very special grounds for re-opening the question. The Trustees, it must be remembered, have for ten years been paying only 4 per cent. to Government on a loan, the cost of which to Government was 4·3 per cent.; and it is neither just nor expedient considering the prosperous financial condition of the port that the general tax-payer should continue longer to bear a burden which admittedly can easily be borne by local trade.

"5. The Governor-General in Council further desires to observe that the Trustees have not quite correctly applied as an argument in support of their claim, the remarks quoted from Mr. Hope's letter of the 19th January 1882, No. 391. Those remarks were intended to support the conclusion that the interest on a loan to be raised by the Trustees to repay Government might be fairly guaranteed from Provincial Revenues, since practically the giving of the guarantee imposed no additional financial responsibility on Government, but what is now proposed is a sacrifice of Imperial Revenue to the extent of more than a lakh of rupees yearly, that is, a contribution from the general tax-payers to the trade of Bombay. The Governor-General in Council does not consider that there are sufficient reasons for transferring the burden of payment of interest on the debt from the Port Trust Fund to the Imperial Revenues, and His Excellency in Council regrets, therefore, that he cannot entertain the proposal of the Trustees. If, however, the Government of Bombay should be willing to pay the Imperial Revenues from Provincial Funds the difference between 4 and 4½ per cent. on the debts in question, the Governor-General in Council would gladly accept an arrangement of this nature."

RESOLUTION.—To be communicated to the Port Trustees for information and guidance, with reference to Government Resolution No. 25, dated 20th January last.

M. W. WILLOUGHBY, Colonel,
Secretary to Government.

BOMBAY CHAMBER OF COMMERCE, 9th April, 1883.

To the SECRETARY TO GOVERNMENT, Marine Department,
Bombay.

SIR,—The Committee of the Chamber of Commerce have had under consideration Government Resolution No. 25, dated 20th January 1883, regarding the interest on the

Port Trust debt, also Government Resolution No. 109, dated 13th ultimo, communicating the reply of the Government of India, No. 991, dated 22nd February 1883, to the application of the Trustees for the continuance for a further period of ten years of the present rate of interest; and they now desire respectfully to submit the views of the Chamber on the subject to Government.

From the correspondence, it appears that the Port Trustees, some time ago, in anticipation of the interest on their debt being raised in June next to $4\frac{1}{2}$ per cent., asked Government to assist them with their guarantee in raising money to pay off their debt, by means of which the revenues of the Trust would have been relieved to the extent of Rs. 1,43,000 per annum; that the authorities on this side, who were familiar with the peculiar circumstances under which so large a debt had been imposed on the Port Trust, assented, but that Her Majesty's Secretary of State for India refused to sanction the proposal. When the Port Trust was formed, the interest on its debt was fixed by Government at 4 per cent. for the first ten years, which end on 25th June next, and at $4\frac{1}{2}$ per cent. thereafter; and the Trustees have now submitted a proposal that the present rate of interest should be continued for a further period of ten years, which, however, the Government of India declines to entertain.

The Bombay Port Trust was formed in 1873, in consequence of the purchase by Government in 1870 of the Elphinstone property at its par value, the entire cost of which was imposed as a special charge on the trade of Bombay, although only a portion of the property was made over to the Trust, and neither the trade nor the community had ever been consulted on the subject. The property was paid for in Government 4 per cent. Paper at 93, and was, after excluding about 70 acres retained by the Imperial Government for the site of the G. I. P. Railway Goods Station at Waree Bunder, along with other foreshore properties belonging to Government mentioned in Schedule C. of the Port Trust Act, made over to the Trust, to bear interest as already mentioned.

The Elphinstone property and the other properties so made over to the Trust were for the most part reclaimed during and after the American Civil War, when labour and materials were very dear; and when, years afterwards, in

1873, the Port Trust was formed, and saddled with the original cost of the Elphinstone estate, it was very generally felt that the amount was much in excess of the actual value of the property. The shareholders of the Elphinstone Company had indeed good reason to be satisfied with the purchase, for, before the intention of Government to take over their property at par, that is to say, at Rs. 1,000 per share, had become known, the market value of the shares of the Company had fallen to from Rs. 600 to Rs. 700 per share.

Throughout the correspondence which passed between the Government of Bombay and the Government of India between June 1870 and March 1872 on the subject of the formation of the Trust, the Government of Bombay represented that it was unreasonable to charge the Trust with the entire purchase price of the Elphinstone Estate, viz., Rs. 1,85,91,597, inasmuch as it included an expenditure of about 70 lacs on the 70 acres of reclaimed land, for a Goods Station for the G. I. P. Railway Company, which the Elphinstone Company had ceded free of charge to Government in consideration of rights of reclamation conceded to the Company. The trade of Bombay was, however, after receiving a few comparatively unimportant concessions, charged with this sum of 70 lacs for the provision of land for the Railway Goods Station—an imperial work, which in any other part of India would have been charged to the imperial revenues.

For years after the establishment of the Port Trust, its annual budgets, in consequence of the excessive burdens imposed upon it, showed large deficits, and in their letter to Government, dated 15th August 1874, the Trustee asked the Government of India to review the whole position, and to grant such relief, or make such concessions, as would enable them to produce an equilibrium in their finances. The Chamber, also, in its memorial to the Viceroy, dated 6th October 1874, submitted that the burdens imposed on the trade were excessive, and were unnecessary if, by an equitable adjustment of the Elphinstone debt, the trade were relieved of such charges as did not belong to it; and it prayed that the concessions suggested by the Port Trust might be granted. Again, on the 24th of July 1877, the Chamber, in General Meeting assembled, passed the following resolution, which, with the memorial of the Chamber,

was transmitted to the Government of India on the 14th, August following :—

“That this Chamber observes with anxiety the rapid growth of the deficit in the revenues of the Port Trust. The deficit already amounts to Rs. 3,94,681, and there is a further estimated deficit of Rs. 2,19,210 for the year ending 31st March 1878, making a total to that date of Rs. 6,13,891. The Chamber therefore resolves to urge upon the Government of India the reconsideration of the position of the Port Trust,” &c.

The Government of India, however, instead of revising the settlement of 1873, and granting such concessions as might have relieved the commerce of Bombay from heavy and unjust burdens, proceeded to acquire the whole of the remaining foreshore, paying for the same in Bonds bearing interest at 4 per cent. per annum, and to vest the same in the Port Trust. By this measure, the Government gave a complete monopoly of the harbour foreshore to the Trustees, who were thus enabled to tax the trade of the Port to a practically unlimited extent, in order that they might be in a position to pay the interest on their debt to Government, while the trade was deprived of the benefits which it had derived from the competition of the various private foreshore owners. In these circumstances, the new Bombay Port Trust Bill No. II. of 1879 was introduced.

Under Schedule C of this new Bill, the full purchase price of the Elphinstone Estate, viz., Rs. 1,85,91,597, was again entered as the capital debt of the Board of Trustees for that estate. The Chamber, in reporting to Government on the 6th of January 1879 on the Bill, protested against this charge, as will be seen from the extract of its Report which is appended hereto. It considered that the cost of reclaiming the site for the Railway Goods Station at Warce Bunder, with interest thereon at 4 per cent. since the establishment of the Port Trust, had exceeded the cost of the land at Mody Bay, the Apollo Bay Reclamation, and the few other minor concessions surrendered by the Government of India to the Trust as an equivalent, by probably not less than 30 lacs of rupees, that the trade was unjustly burdened with this sum of 30 lacs, and that it was entitled to a remission to that extent from the amount entered in the Schedule as the purchase price of the Elphinstone Estate. The Chamber further submitted that the sum of Rs. 6,02,042,10-0 being for interest unpaid on the expenditure of the properties described in Schedule C should be

struck out, as it did not represent property, and the trade was not responsible for interest which accrued when it had not the management of the property.

In the discussions which took place before the passing of the Bill, the Chamber, at the request of the Select Committee of the Legislative Council, recommended certain prices to be paid for the various private foreshore properties, on the distinct proviso that, in addition to the land at Waree Bunder which was then to be surrendered by the G. I. P. Railway Company, the Mody Bay Imperial Estate, which then yielded Rs. 17,800 per annum and was shortly to revert to Government, be made over to the new Trust in perpetuity. The prices so recommended were paid by Government, but, notwithstanding the protests of the Chamber, neither the Mody Bay Imperial Estate, nor the land at Waree Bunder, has ever been made over to the Trust. In its letter to the Secretary to Government in the Legislative Department, the Chamber, on the 26th March, and again on 1st April, 1879, entreated Government to postpone the passing of the Bill until the transfer of these properties to the Trust were incorporated in the Bill, but without effect; and the Chamber's memorial to the Viceroy, praying that His Excellency would withhold his assent from the Bill until provision was made for the transfer, was equally unsuccessful. The Port Trust Bill, with the excessive burdens thereby imposed on the trade, received the assent of the Governor General in August 1879.

It is apparent, then, that, notwithstanding the efforts of the trade to be relieved of burdens which did not belong to it, the reconstruction of the Port Trust in 1879 did not result in any equitable readjustment of the charge made upon it for the purchase price of the Elphinstone Estate, while it gave to the Trustees a monopoly which involved the imposing of fresh burdens upon the trade of the Port to make good their annual deficits, or, in other words, to enable them to raise enough money to pay the interest on their debt to Government. The present position is described by the Trustees in their letter to Government, No. 3397, of the 3rd November 1882 as follows :—

“ The absence of competition which the existing monopoly involves, coupled with the fact that the Trust is bound to raise interest at 4 per cent. upon purchase price of the foreshore properties, while the former owners had to accept whatever interest upon their capital they could earn, has undoubtedly prevented

merchants from obtaining many reductions in rates which they could formerly command."

The Committee were gratified to learn that Government has resolved to reduce the rates for the carriage of wheat from Delhi to Bombay, as it will, they hope, lead to an addition to the export of that article. The expansion of the export trade of Bombay which may result from this reduction, and from the carriage of grain and other articles of export at low rates on railway extensions, will no doubt tend to increase the revenues of the Port Trust; but it is unquestionable that the trade of Bombay will not derive the full benefit of such an increase, owing to the shipping charges at the Port being maintained at a point higher than would have been necessary but for the heavy debt arbitrarily imposed upon it by the Government of India. These charges form an important element in the cost of articles of commerce laid down in Europe. The Committee hope that the Government of India will, in furtherance of the policy which it has announced for the encouragement of the export trade, aid in reducing to the lowest point all charges on trade, particularly where it has, under great disadvantages, to compete with the trade of other countries, and thus remove what the Committee cannot but feel to be a practical injustice to the trade of this Port. Where charges on trade that are under the control of Government press unduly, the commercial interests of this country, whose prosperity demands so largely on its ability to compete successfully with other countries, demand that such charges should be lightened or removed, so far as may be consistent with public equity.

The Trustees have submitted for the consideration of Government the following proposals :—

- (1) That Government would assist them with its guarantee in raising a loan to repay their debt to Government, or
- (2) That Government would continue for a further period of ten years the present rate of 4 per cent. interest on their debt to Government.

By the former proposal the revenues of the Trust would have been relieved to the extent of Rs. 1,43,000 per annum, and seeing that the guarantee would impose no additional liability on Government, no further financial responsibility than what already exists, the Committee regret that H. M.'s Secretary of State should have seen fit to refuse his

sanction to it, although it was recommended by the Government of Bombay and the Government of India.

The Committee also regret that the Governor-General in Council, in his letter dated 22nd February last, has declined to entertain the second proposal of the Trustees, on the ground that it would be a sacrifice of the imperial revenue to the extent of more than a lac of rupees yearly, that is, a contribution from the general tax-payers to the trade of Bombay. The facts, however, above narrated show that in the arrangement of the Bombay Port Trust debt the imperial revenue, that is to say, the general tax-payers, profited to the extent of about 30 lacs of rupees at the expense of the local trade of Bombay, and that, had the trade not been arbitrarily burdened to that extent, the high rates which are now levied to pay interest on a charge that did not belong to it, and ought never to have been imposed upon it, would have been unnecessary. That the position of the Trust has, with extended railway communication, and the growth of trade, greatly improved of late is, the Committee submit, no reason why the Government of India should continue to burden the trade with interest on this debt, and on the other hand, it seems to them to be indisputable that the trade of the Port is fairly entitled to the full benefit of the natural increase which its geographical position, and the opening up of the country, will bring to it.

The Committee of the Chamber respectfully submit that the application of the Port Trustees is a fair and reasonable one, and they sincerely trust that, under the circumstances, the Government of India may be pleased to urge the Secretary of State to reconsider his decision, and sanction the guarantee of the loan which the Trustees proposed to raise to repay their debts to Government, or that the Government of India may, on reconsideration, be pleased to entertain the alternative proposal of the Trustees, and continue the present rate of interest of 4 per cent. for a further period of ten years from June next.

In conclusion, the Committee desire me to request that His Excellency the Governor in Council will kindly forward a copy of this letter to the Government of India.—I have, &c.,

JAMES THORBURN, Chairman.
J. GORDON, Secretary.

Extract from the Chamber's Report on the Port Trust Bill, dated 6th January 1879, under the heading Schedule C, addressed to the Secretary to the Government of Bombay, in the Marine Department.

Schedule C.—In this Schedule the purchase price of the Elphinstone Estate, namely, Rs. 1,85,91,597, is entered as the capital debt of the Board for that estate. The Chamber desires to remind Government that this sum includes an expenditure of about 70 lacs, on 70 acres of reclaimed land, for a Good Station for the G. I. P. Railway Company, which the Elphinstone Company ceded, free of charge, to Government in consideration of rights of reclamation conceded to the Company ; and thus it appears that the trade has been charged with this sum of 70 lacs for the provision of land for the 'Railway Goods Station,—an Imperial work, which in any other part of India would have been charged to the Imperial revenues. In the correspondence which passed between the Government of India and the Government of Bombay in regard to the settlement of the capital debt of the Port Trust, the Government of Bombay protested against the cost of the Waree Bunder land being included in the debt, on the ground that it threw on the local trade of the Port the cost of a large Imperial Railway Station, which, on every principle of equity, the trade should not be called upon to bear. The Government of India admitted the necessity of making some concessions, and, although declining to grant any remission from the purchase price of the Elphinstone Estate, on account of the Waree Bunder Goods Station, they agreed to the proposals of the Government of Bombay, and surrendered to the Trust as an equivalent, free of charge, the Apollo Bay Reclamation, and the land on the Mody Bay Reclamation to the eastward of the Frere Road, besides making a few other minor concessions. The outlay on these works to 31st March 1870 was Rs. 17,40,741 and Rs. 24,48,338 respectively ; but the land at Mody Bay is still in an incomplete state, and a very small revenue has been hitherto derived from these two properties. The trade of Bombay has thus received a very poor equivalent (if indeed it can be called an equivalent) for the cost of the Railway Goods Station at Waree Bunder. The cost of reclaiming the Waree Bunder site, with interest thereon at 4 per cent. since the establishment of the Port Trust, has exceeded the cost of the land at Mody Bay, and of the Apollo Bay Reclamation, with all the revenue that has been derived therefrom, by probably not less than 30 lacs of rupees. It should be remembered that the Elphinstone Estate was purchased and the capital debt of the Port Trust settled by Government without the trade ever having been consulted on the subject. The Chamber considers that the trade is unjustly burdened with this sum of 30 lacs, and that it is entitled to a remission to that extent from the amount entered in this Schedule as the purchase price of the Elphinstone Estate. Should Government, however, be disinclined to grant this remission, the Chamber desires to urge that Government should make over to the Trust all that portion of the land for the Waree Bunder Station, coloured blue on the plan attached hereto, which the G.I.P.R. Company agreed to give back to Government when the land at Parell was made over by Government to the Railway Company. The Chamber has the less hesitation in submitting this reasonable request

when it is borne in mind that the Mazagon Land Company's property was sold by Government in 1864 for 40 lacs of rupees, that the amount so obtained was carried to the credit of a fund called "The Special Fund," out of which the Secretariat, High Court, Public Works, Post Office, Telegraph Office, and other public buildings, which are universally regarded as chargeable to the Imperial revenue, were erected, and that the same foreshore property is now being repurchased, after having been greatly extended and improved, for about half the amount obtained for it in 1864.

The Chamber also submits that the sum of Rs. 6,02,042-10-0, being for interest unpaid on the expenditure on the properties described in Schedule C, should be struck out, as it does not represent property, and the trade is not responsible for interest which accrued when it had not the management of the property.

The Chamber presumes that the amount expended on the Prince's Dock, with other sums of money due and to become due in respect of that work, will be inserted in this Schedule.

No. 174 OF 1883.

MARINE DEPARTMENT,
BOMBAY CASTLE, *24th April*, 1883.

TO THE SECRETARY CHAMBER OF COMMERCE, Bombay.

SIR,—I have the honour to acknowledge the receipt of your letter of the 9th instant, and, in reply, am directed to state, for the information of the Chamber of Commerce, that His Excellency the Governor in Council regrets to be unable to meet the wishes of the Chamber in respect of the representations they desire to be made by Government to the Secretary of State and the Government of India urging a reconsideration of the questions of giving a Government Guarantee to the Port Trust loan, or of continuing the present rate of interest of 4 per cent on the debt of the Port Trust for a further period of ten years from June next, as in view of the very recent decisions on both of these subjects by the authorities above mentioned, His Excellency in Council considers it inexpedient for Government to move further in the matter.—I have, &c.,

M. W. WILLOUGHBY, Colonel,
Secretary to Government.

BOMBAY CHAMBER OF COMMERCE, *2nd May, 1883.*

To the SECRETARY to the GOVERNMENT of INDIA, Department of Finance and Commerce, Simla.

SIR,—I have the honour to inform you that your letter No. 991, dated 22nd February last, in reply to the application from the Trustees of the Port of Bombay for the continuance of the present rate of 4 per cent. interest for a further period of ten years, having been forwarded along with previous correspondence on the subject to the Chamber of Commerce, the Committee of the Chamber addressed a letter, dated 9th April 1883, to the Government of Bombay, submitting the views of the Chamber on the applications which had been made by the Trustees, and requesting that the Government of Bombay would forward a copy of the letter to the Government of India.

The Government of Bombay, however, in their reply No. 174 of the 24th April last, a copy of which is enclosed for the information of the Government of India, state that they are unable to meet the wishes of the Chamber in respect of the representations they desire to be made to the Secretary of State and the Government of India urging a reconsideration of the questions of giving a Government Guarantee to the Port Trust loan, or of continuing the present rate of 4 per cent. interest, as in view of the very recent decisions on both of these subjects by the authorities above-mentioned, His Excellency in Council considers it inexpedient for Government to move further in the matter.

The Committee of the Chamber respectfully submit that the Chamber has a right to be heard in a matter of so much importance to the trade of Bombay, and upon which the decision lies, not with the Local, but with the Supreme, Government; and they therefore direct me to forward herewith printed copies of their communication to the Government of Bombay, of the 9th April last, in which their reasons for supporting the applications of the Trustees are set forth, and to express their hope that it may receive the favourable consideration of His Excellency the Governor-General in Council.—I have, &c.,

J. GORDON, Secretary.

BOMBAY CHAMBER OF COMMERCE, 4th May, 1883.

To the SECRETARY BOMBAY PORT TRUST.

SIR,—With reference to my letter of the 10th April last, forwarding copies of the letter which the Committee of the Chamber addressed to Government on the 9th idem, I am directed to inform you that Government have intimated that they are unable to forward the representation of the Chamber either to the Secretary of State or the Government of India.

The Committee, however, consider that the Chamber has a right to be heard in a matter of so much importance to the trade of Bombay, and they have therefore sent their letter of the 9th April direct to the Government of India.

A printed copy of the Chamber's letter to the Government of India dated 2nd instant, is sent herewith for the information of the Trustees—*I have, &c.,*

J. GORDON Secretary.

BOMBAY CHAMBER OF COMMERCE, 4th May, 1883.

To the SECRETARY to GOVERNMENT, Marine Department, Bombay.

SIR,—I am directed to acknowledge the receipt of your letter No. 174 of the 24th ultimo, stating that His Excellency the Governor in Council is unable to forward to the Government of India or the Secretary of State the representations which the Chamber desires to be made on the subject of the interest on the Port Trust debt.

The Committee regret that His Excellency should have come to this decision, as they consider that the Chamber has a right to be heard in a matter of so much importance to the trade of Bombay, and upon which the decision lies not with the Local, but with the Supreme, Government; and they have, therefore, forwarded to the Government of India printed copies of their communication to the Government of Bombay of the 9th April last. Copies of your reply of the 24th idem were at the same time sent.—*I have, &c.*

J. GORDON, Secretary.

No. 1423.

SIMLA, 12th June, 1883.

GOVERNMENT OF INDIA.

DEPARTMENT OF FINANCE AND COMMERCE.

ACCOUNTS AND FINANCE.

Loans, &c.

To the SECRETARY to the CHAMBER of COMMERCE, Bombay.

SIR,—I have laid before the Governor-General in Council your letter, dated the 2nd May 1883, submitting, for the favourable consideration of the Government of India, a communication from the Chamber of Commerce to the Government of Bombay, of the 9th April last,

in which the Chamber urge a reconsideration of the question of giving a Government guarantee to any loans that may be raised by the Trustees of the Port of Bombay for repaying their original debt to Government, or of continuing the 4 per cent. rate of interest at present paid by the Trustees on that debt. Your letter has been submitted to the Government of India direct, as the Government of Bombay have declined to move further in the matter.

2. The main argument upon which the Chamber base their request for a reconsideration of the decision arrived at by the Government of India on this subject, which was conveyed in my letter to the Government of Bombay, No. 991 of the 22nd February last, is that the revenues of the Port were unduly and unfairly burdened by the charge made upon them for the purchase price of the Elphinstone and other properties made over to the Trust when it was constituted. With reference to this argument, I am to point out that, as has been already observed in my letter of the 22nd February last, the question was settled in 1871, after very careful consideration by the Government of India, and with the full and willing consent of the Government of Bombay representing the interests of the Port. This settlement has been reaffirmed more than once since then, and His Excellency in Council considers that it cannot now be reopened.

3. In the opinion of the Government of India, the only question now open to consideration is whether the finances of the Port are in such a condition that the charge for interest is too heavy to be borne at the present time. The Governor-General in Council cannot admit that this is the case. The present prosperous condition of the finances of the Port Trust so far exceeds the expectations formed when the arrangement of 1871 was made, that there is less justification now than there was at any previous time for transferring a portion of the burden due to the purchase of the properties vested in the Board from the trade of the Port to the general tax-payer. That the trade can well bear the charge is apparent from the fact that on the 30th May last leave was given in the Council of the Governor-General for making Laws and Regulations for the introduction of a Bill, to permit the reduction of the port dues at Bombay below the minimum fixed by the existing law. In these circumstances, the Governor-General in Council regrets that he cannot depart from the decision already arrived at with regard to the rate of interest to be paid by the Port Trust.

4. His Excellency in Council also regrets that, in view of the decision of Her Majesty's Secretary of State, he is unable again to recommend that the Provincial Government should guarantee a loan to be raised in the market by the Trust for repaying the debt due to Government.—I have, &c.,

D. BARBOUR,
Secretary to the Government of India.

APPENDIX T.

WORKING OF THE COAL TRADE ON THE BUNDERS.

No. 1425.

BOMBAY PORT TRUST, SECRETARY'S OFFICE,
ELPHINSTONE CIRCLE, BOMBAY, 12th May, 1883.

To the SECRETARY CHAMBER of COMMERCE.

SIR,—I am directed to acknowledge receipt of your letter, dated 1st March, on the subject of the proposed coal-yard at Malet Bunder.

2. I am in the first place to observe that what the Trustees offered to provide, and what the Chamber agreed to be satisfied with, was a fenced-in yard capable of storing 30,000 tons of coal with separate gates for ingress and egress. It was proposed to provide *five* gates for ingress and egress with weigh-bridges to maintain at each *outward* gate a registering clerk and peon—the former to note and keep a record of every delivery order presented to him and the quantity *said* to be passed out under it. Importers were to attend to their own weighing and delivery, the Trustees accepting no responsibility for the same or for the safety of the coal. The gate registers to be open to the inspection of those concerned.

3. With regard to the coal brought into the yard, the Trustees were to have nothing to do with it, and the cost of the staff required for the two egress gates was fixed at Rs. 190 per mensem.

4. For this accommodation it was estimated that merchants would require to be charged Rs. 1½ per catty per mensem, in addition to the usual ground rent, in order to recoup the extra expenditure incurred.

5. Your letter of 7th March seeks to impose upon the Trust a great deal of work and responsibility in connection with the coal-yards, in addition to that formerly offered to be done and accepted by the Chamber, you ask the Trust to keep a check on the coal removed by boat not merely "to note and keep a record of every order presented and the quantity said to be passed out under it," but to count the number of baskets removed from each heap and the average weight of the coal in the baskets, to keep a record of the boats' register number, tindal's name, and estimated capacity of the boat, quantity said to be loaded and destination, to supply the boat with a boat-note, counterpart of which to be retained by the Trust.

6. With regard to coal removed into the Town instead of merely keeping a record of every delivery order presented to him, and the

quantity *said* to be passed out under it, the Trustees are now asked to check by the weigh-bridge the weight given in every cart-ticket.

7. The Trustees are further asked to tally the quantity of coals received into the yard, to give the number of the boat bringing the coal, and its registered or approximate carrying capacity, and to keep a record of the boat-notes granted by the discharging ship. The Trustees are then required to keep a ledger account of each shipment and to furnish to merchants on the 1st or 2nd of every month a statement of the receipts, deliveries, and balance of coal in hand.

8. It is further suggested that the cubic contents of each stock be ascertained from time to time so as to check the balances shown by the account kept of receipts and deliveries.

9. If the Trustees were thus to satisfy themselves as to the quantity of coal brought into the yard to watch and guard the coal while stored, to weigh it on delivery, and to give the merchant an account of all these transactions, they might *say* that they were not responsible for any coal which might turn out to be short, but it would appear to be extremely difficult really to get rid of responsibility.

10. It must be obvious that an establishment which would be adequate for the performance of the duties mentioned in para. 2 and 3 could not undertake the extended duties above mentioned. The Traffic Manager's estimate is that the following staff would require to be maintained at five gates and in the yard:—

1 Head Inspector for yard.	...	Rs. 50
5 Yard Inspectors	...at Rs. 30	„ 150
2 Yard Peons	...at „ 10	„ 20
2 Night Watchmen	...at „ 12	„ 24
10 Gate Clerks	...at „ 35	„ 350
6 Gate Peons	...at „ 10	„ 60
Stationery	...	„ 20

Per mensem...Rs. 6,741

This is of course over and above the cost of weigh-bridges and fencing which would be considerable.

11. The space to be enclosed for 30,000 tons is 1,50,000 square yards or 300 catties. It would not be safe to reckon upon more than $\frac{2}{3}$ ds of this being steadily occupied. It will be seen, therefore, that the cost of the necessary staff alone comes to about Rs. $3\frac{1}{2}$ per catty per mensem, and this is an expenditure which the Trustees do not believe the coal merchants will face, over and above the ordinary ground rent. Nor can it reasonably be expected that the Trustees will bear this expense out of the ground rents derived from coal. If, as seems likely would be the case, only $\frac{1}{3}$ ds of the enclosed space would regularly produce rent, the rate would thus be brought down to Rs. 5 per catty for the whole enclosure, and if the maintenance of the above establishment were deducted, there would only remain Rs. $1\frac{1}{2}$ per catty per mensem, or about 5 annas per square yard per annum, for the best situated foreshore land in Bombay, which cost probably Rs. 25 per square yard, and for which Rs. 7 is freely paid for other merchandise. This, it will be observed, is without making any allowance for fence or weigh-bridges. Frere Reclamation has been mentioned as a convenient place for a store-yard, and when the canals have been deepened, it is

likely that a large quantity of coal will be sent there. The rents now charged at Frere Reclamation are Rs. 5 per catty, and to work a yard on the plan proposed by the Chamber would apparently cost Rs. 3½ per catty for establishment alone. If the same allowance, viz. 1rd, be allowed for unoccupied land, the Trustees would then be receiving Rs. 3.5 for rent and disbursing Rs. 3½ per square yard for a special (over and above their ordinary) establishment to watch and control the goods!

12. If the Chamber is not prepared to abide by the arrangement made in letters dated 1st November and 8th November 1882, and if they do not see their way to agree to an additional charge of Rs. 3½ per catty per mensem being levied, then there are only two other alternatives which present themselves—one is for the Chamber to rent the coal-yard and work it themselves, paying the Trustees the ordinary ground rent; and the other is to do away with all checks, to entrust the landing of their coal to some responsible mucedum, who would use the fenced enclosure for his own safety.

13. The Traffic Manager puts the latter proposal in the following way:—"The landing and delivery of coal to be undertaken by the Port Trust through the medium of a landing contractor. I have ascertained that Messrs. Dadabhoy Hormusjee and Company are willing to land coal and give delivery of same at the rate of 12 annas per ton, and to be answerable for all shortage, &c., provided a wastage of 1 per cent. is allowed, and also subject to the following conditions:—

"1. That in the monsoon the contractors will not be called upon to discharge per diem over 150 tons per steamer or 75 tons per ship."

"2. That in the fair season the contractors will not be called upon to discharge per diem over 200 tons per steamer or 100 tons per ship."

"3. All Government holidays not to be considered working days."

"4. Vessels to find all weighing appliances."

"5. Ground rent to be paid by importers at the rate of Rs. 7 per catty per mensem."

14. If this last suggestion be looked upon with favour by the Chamber, then the conditions can be gone into in further detail.—I have, &c.,

G. MANSON, Secretary.

BOMBAY CHAMBER OF COMMERCE, 22nd August, 1883.

To the SECRETARY of the BOMBAY PORT TRUST.

SIR,—I am directed to acknowledge the receipt of your letter No. 1425, dated the 12th May last, on the subject of the proposed coal-yard at Mallet Bunder.

The Committee, having circulated the letter to those merchants who are principally interested in the coal trade, desire me to say

that the proposal embodied in para. 13 of your letter under acknowledgment that the landing and delivery of coal be undertaken by the Port Trust, through the medium of a landing contractor, seems to commend itself to the approval of the trade. To carry out this proposal, however, a regular working agreement between the Trustees and those merchants who are prepared to support the proposal will be necessary, in which, as observed by the Trustees, the details of the scheme can be settled. Of the conditions mentioned, however, the Committee desire to recommend the following modifications mentioned in para. 13 of your letter :—

1. The percentage of waste only to be given in the coals turn out short, merchants being entitled to all weighed out.
2. The rate of discharge per diem to be not less than 200 tons per steamer in the monsoon as well as in the fair weather.
3. All holidays fixed by the Chamber, instead of those fixed by Government, not to be considered working days.—I have, &c.,

J. GORDON, Secretary.

No. 3893.

BOMBAY PORT TRUST, SECRETARY'S OFFICE,
ELPHINSTONE CIRCLE, BOMBAY, 21st December, 1883.

To the SECRETARY to the CHAMBER of COMMERCE.

SIR,—With reference to your letter dated 22nd August on the subject of landing coal, it has since been ascertained that Messrs. Dadabhoy Hormusjee & Co., to whom the Trustees looked to carry out the sub-contract, are not now prepared to undertake the work.

The Traffic Manager of the Trust has accordingly been in communication with other landing muccadums in order to ascertain whether the work could be done by other agency. Messrs. Currumsey Khetsey & Co. decline to undertake the work, but Messrs. C. J. Khambatta & Co. and Vullibhoy Khanbhoy & Co. are prepared to do so on the conditions named in their letters, dated 18th October and 26th October respectively, copy of which is enclosed.

I am directed to enquire whether in these circumstances the Chamber would wish the matter to be proceeded with further.—I have, &c.,

G. MANSON, Secretary.

BOMBAY, 18th October, 1883.

The TRAFFIC MANAGER, BOMBAY PORT TRUST, Carnac Bunder.

SIR,—Referring to your letter No. $\frac{A-6}{4807}$ of the 9th instant, we beg leave to inform you that we shall undertake to land all coals at (14) fourteen annas per ton, provided we are allowed the option to take

work for such firms and merchants who may guarantee to give us all the coals that are consigned to them for the whole year round. But if we are asked by the Port Trust to land coals for such parties who will find great difficulty in landing during monsoon or when the boat and cooly rates are high, we shall then have to charge according to the market fluctuation rates.—We have, &c.,

C. J. KHAMBATTA & Co.

BOMBAY, 26th October, 1883.

To the TRAFFIC MANAGER, BOMBAY PORT TRUST, Bombay.

SIR,—In acknowledging the receipt of your letter No. ^{A-6}₄₈₀₆, dated 9th instant, we beg to inform you that we shall be glad to enter into a contract with the Trustees of the Port to land, take charge of and deliver coal on the following terms and conditions :—

- 1st.—The coal to be received alongside vessels in the stream and landed and stacked at any Bunder at the southern sides of the Gunpowder Bunder at the rate of Re. 1 per ton.
- 2nd.—But if the coal be landed and stacked at the Frere Land Bunder, the rate for doing so to be Re. 1-6 per ton.
- 3rd.—Weighing appliances on the ship from which coal is to be taken to be found by the ship concerned.
- 4th.—The full quantity of coal received from the vessel to be delivered, a wastage of one per cent. being allowed on such quantity. But if the delivery should turn out to be in excess of the quantity received from the ship, one half the value of such excess delivery to be paid to us.
- 5th.—Delivery to be taken from steamers at the rate of 200 (two hundred) tons per day, and from ships at the rate of 100 (one hundred) tons per day.
- 6th.—All shortages *minus* one per cent., clause 4, to be made good by us.
- 7th.—A deposit, to be mutually fixed, to be kept with the Trustees to ensure the proper carrying out of the contract.
- 8th.—The full delivery of each separate consignment by every steamer and ship to be taken within three months, failing which, at the expiration of that period, we should be paid “watching charges” at the rate of Rs. 10 (ten) per month for every such consignment, until final delivery of the same is taken.
- 9th.—This contract, in consideration of the fact that it will involve a large first expenditure of about Rs. 50,000 (in addition to our present appliances) to enable us to carry it out efficiently, to run for a period of 3 (three) years certain.

2. We observe in your letter under reply, it is stated that under this contract it is only intended to deal with such coal “as merchants” may ask the Trustees to handle. This apparently contemplates

merchants being allowed the option of making their own arrangements, which introduces an element of uncertainty into so important a contract, which we cannot assent to. If we undertake the work treated of in this letter, we shall have to maintain a large fixed establishment at very considerable cost to enable us to perform it expeditiously, efficiently, and satisfactorily. It would be obviously unfair, therefore, if merchants were permitted in the event of a possible temporary reduction in the bazaar rate of tonnage, &c., to make their own arrangements independently of the contract concluded by the Trustees in the interests of all concerned for the performance of the said work. Unless, therefore, we are entrusted through your department with the work of dealing with coal required to be landed, &c., by *all* merchants at the rates and on the conditions above specified, we regret to say that we cannot undertake to enter into a contract on any other terms.—We are, &c.,

VULLIBHOY KHANBHOY & Co.

BOMBAY CHAMBER OF COMMERCE, 26th January, 1884.

THE SECRETARY BOMBAY PORT TRUST:

SIR,—The Committee of the Chamber desire me to acknowledge the receipt of your letter No. 3893, of the 21st ultimo, on the subject of landing coal, which they have also submitted to the principal coal importers.

In reply, I am directed to state that in the opinion of the trade it would be very desirable if an arrangement could be made with Messrs. Vullibhoj Khanbhoj and Company, who, the Committee are informed, are large landing contractors, quite capable of carrying out the proposed scheme, and of furnishing adequate security to the Port Trust.

- It appears, however, to the Committee to be evident that the true nature of the required contract has not been made clear. By far the larger proportion of the coal imported is sold for final delivery to be taken alongside by the purchasers, who must be left at liberty to land
- their coal and deal with it as they choose. The Trust and their contractor, therefore, can only deal with such coal as may be placed in their hands for safe custody in the enclosure. It is, however, probable that the Port Trust would consider it advisable to confine the storage of coal to one place by making it compulsory that anything intended to be held for more than fifteen days must go into their enclosed yard, so that the contractors would thus be sure of handling all permanent stock: Premising that it is practicable to deal with Messrs. Vullibhoj Khanbhoj and Company, the Committee will take the various paras. of their tender *seratim* :—

- 1 and 2.—As above explained, the contractors would only have to deal with one bunder, and there is no occasion, therefore, to introduce a differential rate. If they agree to the other matters of detail, the Committee do not think Re. 1 per ton extravagant all the year round. It is

worthy of consideration, however, whether it might not be advisable to make a difference between the fair season and the monsoon, say 14 annas from 1st October to 31st May, and 18 annas from 1st June to 30th September.

3.—Weights and Scales are always found by the ship.

4.—Wastage to the extent of 1 per cent. to be allowed to the contractors, but on no account should they be entitled to any over plus, as this would be a direct incentive to unfair weighing at time of re-delivery. Further, during the monsoon months—when the reserve stock is naturally most dealt in—there is a gain in weight from moisture of from 2 to 7½ per cent.

On coal kept in stock over 12 months, an additional one per cent. might be allowed for wastage to the contractors.

5.—The size of coal cargoes is increasing every day, and the Committee would therefore suggest that the rate of delivery be put at—

200 tons per working day for 2,000 tons or under.

250 do. do. do 2,000 tons to 2,750.

300 do. do. do over 2,750 tons.

Ships, 100 tons per day would do.

6 and 7.—Are in order.

8.—The Committee do not see why extra watching charges should be charged after three months. The coal requires no more watching in the second three months than the first. Moreover, the object of the scheme is to obtain from the Port Trust cheap as well as secure storage.

9.—The Committee do not consider the request for a three years agreement at all unfair. During the first year, the yard would only just begin to get into work.

In conclusion, the Committee would take the liberty of suggesting to the Port Trust the urgent necessity of adopting a scheme of this nature for the safety of the trade. So long as there is not greater security than at present, importers will not land coal. Several firms have not landed a ton of coal on the bunders for years.

The Committee feel assured that it would be equally for the advantage of the Port Trust and of the trade, were an arrangement on the lines indicated above completed with Messrs. Vullibhoy Khanbhoy and Co. with as little delay as possible.—I have, &c.,

• J. GORDON, Secretary.

APPENDIX U

QUARANTINE IN EGYPT.

No. 1639 of 1883.

GENERAL DEPARTMENT,

BOMBAY CASTLE, 15th May, 1883.

To the SECRETARY CHAMBER of COMMERCE, Bombay.

SIR,—I am directed by His Excellency the Governor in Council to subjoin, for the information of the Chamber, copy of a telegram, dated the 14th instant, received from Her Majesty's Consul at Alexandria :—

“Owing to sudden increase of cholera at Bombay, Sanitary Board declared Bombay contaminated, and quarantine, in proportion to duration of voyage, is imposed from to-day, according to published regulations.”

I have, &c.,

J. MONTEATH,

Acting Under-Secretary to Government.

BOMBAY CHAMBER OF COMMERCE, 18th May, 1883.

• To the ACTING UNDER-SECRETARY to GOVERNMENT, General Department, Bombay.

• SIR,—I am directed by the Committee of the Chamber of Commerce to acknowledge the receipt of your letter No. 1639, of the 15th instant, communicating copy of the following telegram, dated 14th instant, received from Her Majesty's Consul at Alexandria :—

“Owing to sudden increase of cholera at Bombay, Sanitary Board declared Bombay contaminated, and quarantine, in proportion to duration of voyage, is imposed from to-day, according to published regulations.”

The Committee supposed that the Resolution of the Government of Bombay, of the 6th March 1882, appointing a permanent Medical Board to report to Government on

every Friday, whether the trifling cholera usually to be found in Bombay has assumed an epidemic form would have induced the International Sanitary Board at Alexandria to defer imposing a vexatious and unnecessary quarantine until the report of the Medical Board had been communicated to them. The Committee believe that it would then have been found that the amount of cholera which now exists in Bombay is not greater than usual at this time of year, that it consists of a few scattered cases, and that the prevalence of it at the village of Coorla was attributable to local causes which might have been prevented. The measures adopted by the Government, under that Resolution, are sufficient to prevent any possible danger to Egypt from cholera, the more so as cholera is believed, by those most competent to judge, never to lie dormant in the system more than ten days. In spite, however, of these measures, the Egyptian Sanitary Board has, on apparently imperfect information, imposed quarantine on vessels coming from Bombay, by which the public will, probably for months, be unnecessarily subjected to intolerable inconvenience, and the shipowning interests to grievous injury and loss.

The imposition of quarantine, in previous years, was always felt to be a grievous inconvenience, resulting in great loss of time and money; but the inconvenience must be infinitely greater now when the capacity of the Canal is taxed to its utmost, and the number of vessels passing through it yearly increasing. So great indeed has been the increase of the traffic in late years that it is now seriously contemplated to construct a second Canal, the present one being likely, it is apprehended, to prove totally unequal to the traffic. In 1873, the number of vessels which passed through the Canal was 1,171, and their tonnage 2,085,270; in 1882, the number of vessels which passed through was 3,198, and their tonnage 6,811,521; and of all this traffic, upwards of 80 per cent. consists of British vessels. The effect of the imposition of quarantine will be felt throughout Europe and the East in the detention of mail and other steamers, and in the vexatious and expensive hindrances and regulations to which vessels are subjected. Pilots are not permitted to come on board the vessels, but proceeding a head in tugs, hired at exorbitant prices, mislead the vessels on to the banks and shoals.

The Committee do not of course complain against

reasonable precautions being taken by the Egyptian authorities against infection, but they submit that there is nothing which has occurred up to this time to justify the imposition of quarantine against Bombay. Quarantine is imposed or removed by the International Sanitary Board at Alexandria, and it is impossible to exaggerate the loss of time and money which has arisen from the action of this Board. It is apparently an irresponsible body composed of delegates sent from various countries; and Earl Granville, in his reply to the deputation of shipowners that waited upon him on the 27th of February, 1882, observed that one of the great difficulties in dealing with the question of quarantine in Egypt was this—that there were delegates, that some of the countries who sent delegates had really no interest in the matter whatever, neither commercial nor sanitary, that there were other countries like Great Britain that had enormous commercial interests, who never complained against reasonable precautions being taken against infection, while a very large number of the delegates were certainly more sensitive of the danger of infection than the injury to commerce which did not concern them. When it is remembered that upwards of 80 per cent. of the traffic of the Canal belongs to Great Britain, and that a large majority of the delegates forming the International Board represent countries engaged in petty rivalry with, and hostile to, the commercial greatness of England, the Committee respectfully suggest whether, as the only means of removing the vexatious and unnecessary restrictions which are constantly imposed on the trade of India, endeavours might not be made by Her Majesty's Government to procure the abolition of the International Sanitary Board, and the transference of their functions direct to the Egyptian Government who would doubtless deal with all questions affecting the public health of Egypt from purely sanitary considerations.

At the Meeting of the Bombay Medical and Physical Society held on Friday the 10th March, 1882, the present quarantine regulations in Egypt were considered, and the members, after considerable discussion, unanimously agreed “that the quarantine regulations as at present enforced in Egypt against Bombay are uncalled for, not in accordance with professional knowledge, or with the personal experience, of the members, of cholera.” The Meeting was moreover of opinion that free pratique should be given

to all ships arriving at Suez from Bombay with a clean bill of health during the whole voyage. It was the authoritative opinion of the Medical profession that the period during which cholera lies latent in the system is so short that there was not the least danger of its being introduced by passengers, and that, in fact, no instances were known in which cholera had ever been so introduced from India to Egypt.

The Committee, therefore, desire to protest in the strongest terms against the imposition of this vexatious and unnecessary quarantine, and further to express their earnest hope that His Excellency the Governor in Council will, by incessant remonstrance with the Egyptian authorities, and by urgent representations to the Government of India, and Her Majesty's Government, do all that lies in his power to procure its immediate removal, and so put a stop to the inconvenience and loss which the public and shipowners must suffer, and that as time is a great object, he will kindly telegraph his representations to these authorities.

In conclusion, I am directed to remind His Excellency the Governor in Council that on the 27th February, 1882, Earl Granville instructed Her Majesty's representative in Egypt to state to the Egyptian Government that Her Majesty's Government were not prepared to acquiesce in the possible recurrence of such arbitrary and capricious acts of the International Board of Health as had of late caused enormous losses to British shipping; that they could no longer consent that an irresponsible body should have the power of making unreasonable laws which disturbed the whole Eastern Trade of Great Britain, and uselessly impeded her communications with India; that, as the powers of the International Board were founded upon the right which Egypt possessed to protect herself against contagious diseases, and as the Egyptian Government was largely represented upon the Board, Her Majesty's Government must look to that of the Khedive to take the initiative in remedying the present state of affairs. Further, that Her Majesty's Government expected that the Government of the Khedive would insist, without delay, upon the compilation of a Sanitary Code; that the Code should be distributed to all the Governments concerned; that the Board should be strictly bound by it, and that the Egyptian

Government should, either through its delegates, or, if necessary, through its officers, prevent all infractions of the spirit or letter of the rules thus drawn up. As the present imposition of quarantine shows that His Lordship's representations on that occasion, to the Egyptian Government have been totally disregarded, the Committee trust that His Excellency will kindly draw His Lordship's attention to the fact, and urge His Lordship to insist that the instructions then given be strictly carried out by the Egyptian Government.—I have, &c.,

J. GORDON, Secretary.

No. 1771 of 1883.

GENERAL DEPARTMENT,

BOMBAY CASTLE, 24th May, 1883.

From J. MONTEATH, Esq., C.S., Acting Under-Secretary to the Government of Bombay, to the SECRETARY to the CHAMBER of COMMERCE, Bombay.

SIR,—I am directed by His Excellency the Governor in Council to acknowledge the receipt of your letter, dated the 18th instant, on the subject of the imposition of quarantine in Egypt on arrivals from Bombay, and in reply to state that the reports of the Medical Board at Bombay are telegraphed every week to the British Consul at Alexandria, and that an emphatic protest against the imposition of quarantine has already been made by this Government.

2. A copy of your letter has this day been forwarded to the Government of India, with an intimation that His Excellency the Governor in Council entirely concurs in the view therein stated, that the returns of cholera in the city and island of Bombay show no alarming increase or symptoms of an epidemic character, and trust that Her Majesty's Government will without delay be moved to insist on the removal of a wholly unnecessary interference with trade.—I have, &c.,

J. MONTEATH,
Acting Under-Secretary to Government.

BOMBAY CHAMBER OF COMMERCE, 25th May, 1883.

To the SECRETARY LONDON CHAMBER of COMMERCE, 84-85, King William Street, London, E. C.

DEAR SIR,—I am desired by the Committee of the Chamber of Commerce to forward to you five copies of a letter addressed by this Chamber to the Government of Bombay, protesting against the imposition of quarantine in the Suez Canal.

I also beg to confirm the following telegram which the Committee of this Chamber despatched to you on the 23rd instant :—

“ Please urge Lord Granville to press Egyptian authorities to remove quarantine Suez Canal. Restrictions vexatious, unnecessary. Public health Bombay perfectly good.”

The Committee desire me to express their hope that your Chamber will kindly lend its powerful support towards procuring the immediate removal of the present unnecessary quarantine and the prevention of its imposition in future, unless the same may be warranted by the state of the public health in Bombay.—I am, &c.,

J. GORDON, Secretary.

THE LONDON CHAMBER OF COMMERCE,

84-85, KING WILLIAM STREET, LONDON, E. C.,

13th June, 1883.

J. GORDON, Esq.

DEAR SIR,—I am in due receipt of yours of 25th May, as also of your telegram of 23rd ultimo. You will have seen from the English newspapers which have reached you before this, as also from the copy of the monthly “Journal” of this Chamber which was sent you on publication that I have communicated with Earl Granville as you desire on the subject of Suez Canal quarantine. You will find His Lordship’s reply printed in the June issue of my “Journal.” His Lordship is quite alive to the importance of the question. Considerably strong pressure has been brought to bear upon him by various Maritime Associations, and I think that everything will be done which it is possible for the Government to do to bring about a more satisfactory state of things. You will, of course, have observed the agitation which has lately arisen in this country for the creation of a second and exclusively British Canal. This agitation, if it leads to nothing else, will probably force the French management of the existing Canal to deal with their Maritime Customers in a more business-like and satisfactory manner. I shall be glad at all times to co-operate actively with your Chamber on all matters of general interest, and even, where our views do not agree with yours, to give your desires every publicity through the British Press.—Yours faithfully,

KENRIC B. MURRAY, Secretary.

THE LONDON CHAMBER OF COMMERCE
84-85, KING WILLIAM STREET, LONDON, E. C.,
20th June, 1883.

J. GORDON, Esq., Secretary Bombay Chamber of Commerce.

DEAR SIR,—I am in receipt of your letter of 19th May, enclosing copies of your correspondence with the Acting Under-Secretary of the Indian Government.

Following up the action previously taken by the London Chamber, on behalf of the Bombay Chamber, and with reference to which I have already written you; I yesterday sent a copy of your enclosure to Earl Granville, and also to the Secretaries of the Liverpool, Manchester, and Glasgow Chambers of Commerce.

It was stated at our last Council meeting that the transmission, by this Chamber, to the Foreign Office, of your telegram, with reference to the state of public health in Bombay, had been of material assistance in enabling the Government to decrease the quarantine difficulties in the Canal.

I need hardly add that the London Chamber of Commerce will, at all times, be glad to co-operate with yours on all matters of general interest.—I am, &c.,

KENRIC' B. MURRAY, Secretary.

No. 2220 OF 1883.

GENERAL DEPARTMENT,
BOMBAY CASTLE, 27th June, 1883.

From J. MONTEATH, Esq., C. S., Acting Under-Secretary to the Government of Bombay, to the SECRETARY to the CHAMBER OF COMMERCE Bombay.

SIR,—With reference to your letter of the 18th May last, and my reply No. 1771 of the 24th idem, I am directed by His Excellency the Governor in Council to forward, for the information of the Chamber, the accompanying copy of a despatch No. 12, dated the 15th instant, addressed by the Government of India to Her Majesty's Secretary of State for India on the subject of the recent action of the Egyptian Sanitary Board, placing Bombay in quarantine.—I have, &c.,

J. MONTEATH,
Acting Under-Secretary to Government.

No. 12 OF 1883.

GOVERNMENT OF INDIA.
HOME DEPARTMENT.
SANITARY.

SIMLA, 15th June, 1883.

To the Right Hon'ble the EARL of KIMBERLEY, Her Majesty's Secretary of State for India.

MY LORD,—In continuation of our despatch No. 8, dated the 17th April 1883, we have the honour to transmit a copy of a letter* from the Govern-

* No. 1772, dated 24th May 1883.

ment of Bombay giving cover to a remonstrance from the Chamber of Commerce at Bombay on the recent action of the Sanitary Board in Egypt, placing Bombay in quarantine.

2. The action of the Egyptian Sanitary Board appears to us to have been in this case even more than usually hasty and ill-considered, and we trust that early measures may be taken either to reform the constitution of the Board or to limit the powers of that body.—
We have, &c.,

RIPON.
D. M. STEWART.
E. BARING.
T. F. WILSON.
C. P. ILBERT.
S. C. BAYLEY.
T. C. HOPE.

APPENDIX V

THE CUSTOMS TARIFF OF MOZAMBIQUE.

No. 1765 of 1883.

REVENUE DEPARTMENT,

BOMBAY CASTLE, *2nd March*, 1883.

To the SECRETARY to the CHAMBER of COMMERCE, Bombay.

SIR,—In continuation of the letter from this Government, No. 2569, dated 20th May 1878, I am directed to forward a copy of the papers, noted in the margin, regarding a modification recently made in the existing customs tariff of Mozambique, which will sensibly affect the trade carried on by Bombay with that Colony, and to request that His Excellency the Governor in Council may be favoured with the views of the Chamber on the subject after consultation with the principal local firms interested in the trade with Mozambique—I am, &c.,

Letter from the Government of India, Department of Finance and Commerce, No. 39-S, dated 16th February 1883, with accompaniments.

J. MONTEATH,
Acting Under-Secretary to Government.

No. 39-S.

GOVERNMENT OF INDIA.

DEPARTMENT OF FINANCE AND COMMERCE.

SEPARATE REVENUE, &c.

Customs.

CALCUTTA, *16th February*, 1883.

To the SECRETARY to the GOVERNMENT of BOMBAY, Revenue Department.

SIR,—In continuation of the letters, marginally noted, from the Government of India, in the Department of Revenue, Agriculture and Commerce, I am directed to forward copy of a communication received from Her Majesty's Agent and Consul General, Zanzibar, regarding a modification recently made in the existing customs tariff of Mozambique, which will sensibly affect the trade carried on by Bombay with that Colony, and to request that the information given by that officer may be published locally.

[Statistics, No. 491-494, dated 8th December 1877.

Statistics, Nos. 154—157C., dated 9th May 1878.]

2. I am also to request that, with the permission of His Excellency the Governor in Council, the Chamber of Commerce of Bombay and local firms specially engaged in the trade with Mozambique may be

consulted on the matter, and that the Government of India may be favoured at an early date with their views, together with an expression of the opinion of His Excellency the Governor in Council on the subject, and a statement of the particular interests which will be affected and the extent to which the additional duty will probably operate in restricting trade. The enclosed statement shows the trade between India and Mozambique for the four years 1878-79 to 1881-82.

3. A very early reply is requested.—I have, &c.,

J. E. O'CONNOR,
Assist. Secretary to the Govt. of India.

No. 63.

GOVERNMENT OF INDIA.
DEPARTMENT OF FINANCE AND COMMERCE.

*Enclosure of Despatch No. 20 S. R. of 1883.

17th December, 1882.

From S. B. MILES, Esq., Her Majesty's Acting Agent and Consul General, Zanzibar, to the SECRETARY to the GOVERNMENT of INDIA, Foreign Department.

I learn from Her Majesty's Consul at Mozambique that a Notification has been issued by the Portuguese Governor-General of that Province modifying the existing customs tariff there, one of the new articles of which will sensibly affect, and is probably directed at, the trade between Portuguese East Africa and British India. I annex a copy of this article (41). Mr. Consul O'Neill states in his report to Her Majesty's Foreign Office that three-fifths of the commerce carried on in that Province is in the hands of Indian traders, who are mostly agents for firms in Bombay and Zanzibar, and who deal largely in Indian cottons. It will be upon them, and upon them only, that this new and almost prohibitive duty will fall.

The new tariff will come into force from the first January 1883.

Extract from Portaria of the Governor-General of Mozambique modifying and altering the Customs Tariff now in force.

6. Article 41 of the existing tariff is substituted by the following:—

Article 41.—All goods coming from Foreign ports will pay the duties laid down in the respective tables, subject to the following exception:—

Exception.—All merchandise similar to that of European manufacture coming from any Foreign ports of Asia or Africa shall pay a duty of 20 per cent. in addition to those laid down in the tariff.

7. *Article 41.*—Goods coming from Portugal, the adjacent islands on the Portuguese ultramarine possessions, and of national manufacture, shall pay only 60 per cent. of the duties laid down in this tariff, excepting powder, arms and spirits, which shall pay full duty.

Exception.—Cotton or woollen or linen textures of Portuguese manufacture, which shall be free of all duty for the space of 10 years.

STATEMENT of Exports and Imports from and into British India into and from Mozambique during each of the official years 1878-79 to 1881-82.

EXPORTS—INDIAN PRODUCE AND FOREIGN MERCHANDISE.

ARTICLES.	1878-79.		1879-80.		1880-81.		1881-82.	
	Quantity.	Value. Rs.	Quantity.	Value. Rs.	Quantity.	Value. Rs.	Quantity.	Value. Rs.
COTTON—								
PIECE-GOODS—								
Grey (unbleached) .. { Foreign	723,046	71,860	1,073,023	1,03,321	1,110,278	1,26,584	1,200,404	1,29,500
{ Indian	2,025,410	2,36,350	2,223,183	2,44,928	5,958,279	6,88,005	2,730,183	2,91,775
White (bleached)	49,580	9,269	96,045	16,838	140,549	24,028	84,145	16,379
Coloured, &c. { Foreign	1,704,405	2,53,717	2,384,173	30	52	19	3,175	614
{ Indian	9,044	2,915	118,418	3,629,397	3,029,379	4,43,883	1,701,267	2,62,790
Other Cotton Goods .. { Foreign	..	42,365	..	25,719	378,200	77,942	..	27,781
{ Indian	..	2,750	..	76,702	..	95,962	..	94,536
Total	..	3,77,211	..	17,048	..	12,055	..	11,930
GRAIN AND PULSE—								
Rice	..	2,42,046	..	5,66,278	..	6,89,457	..	5,03,265
All other Articles	..	..	..	2,87,725	..	7,78,021	..	3,32,130
Total Merchandise	913	5,780	990	6,299	13,031	65,092	20,028	80,921
Treasure	..	1,91,668	..	3,24,632	..	4,30,943	..	3,29,702
Total Merchandise and Treasure ..	..	8,16,704	..	11,84,934	..	19,63,423	..	12,48,018
	..	..	..	11,000	..	2,08,425	..	72,550
	..	8,16,704	..	11,95,934	..	22,31,818	..	13,18,568

IMPORTS.

ARTICLES.	1878-79.		1879-80.		1880-81.		1881-82.	
	Quantity.	Value. Rs.	Quantity.	Value. Rs.	Quantity.	Value. Rs.	Quantity.	Value. Rs.
Ivory	128,468	4,95,559	104,245	4,00,102	106,276	4,28,185	122,543	5,01,395
All other Articles	..	1,25,171	..	1,32,887	..	1,59,032	..	56,992
Total Merchandise	..	6,20,730	..	5,32,989	..	5,87,217	..	5,57,487
Treasure	..	1,96,165	..	3,05,389	..	2,92,274	..	4,07,141
Total Merchandise and Treasure ..	..	8,16,895	..	8,38,378	..	8,79,491	..	9,64,628

BOMBAY CHAMBER OF COMMERCE, 15th March, 1883.

To the COMMITTEE of the BOMBAY MILLOWNERS' ASSOCIATION.

GENTLEMEN,—I am directed by the Committee of the Chamber of Commerce to forward for your opinion a letter, with accompaniments, which has been addressed to them by the Bombay Government regarding the modification recently made in the existing customs tariff of Mozambique. The Committee will observe that the alteration is principally directed against Indian manufactured goods and yarns, and this has probably arisen from the fact that spinning and weaving factories are now being established in Portugal to which Mozambique belongs.

The statement, which accompanies the letter from the Government of India to the Bombay Government, shows the total exports and imports between the whole of British India and Mozambique in the four years therein mentioned. The statement published by the Bombay Millowners' Association of the exports of piece-goods and yarns shows the quantities sent to Zanzibar, and Mozambique together. Zanzibar is not of course affected by the alteration in the customs tariff of Mozambique, and I have, therefore, prepared a statement showing the number of packages of Bombay manufactured piece-goods exported from Bombay to Mozambique and adjoining territory under the Portuguese Government, in each of the months of 1882 and in January and February 1883. No yarn is exported. From the statement the Committee will be enabled to see the extent of the trade in local piece-goods between Bombay and Mozambique.

The attention of the Committee is also requested to the minutes of the Committee of the Chamber on the communication received from Government.

The Committee of the Chamber desire me to suggest that if the Millowners' Association take this matter up, they might either address Government direct on the subject, or, if they think proper, to address the Chamber, the Chamber will be happy to forward their representations to Government.—I remain, &c.,

J. GORDON, Secretary.

STATEMENT showing the number of packages and yards of Bombay manufactured Piece-Goods exported to Mozambique and adjoining territory under the Portuguese Government.

	MOZAMBIQUE.		QUILLIMANE.		DELAGOA BAY.		INHAMBANE.		INOO.		TOTAL.	
	Packages.	Yards.	Packages.	Yards.	Packages.	Yards.	Packages.	Yards.	Packages.	Yards.	Packages.	Yards.
1882.												
January	318	4,13,880	41	63,670	9	16,600	..	..	61	96,850	318	4,13,880
February	101	1,71,541	152	2,31,600	9	20,400	..	..	..	..	212	3,48,591
March	75	93,352	108	1,56,720	21	37,800	..	..	..	..	236	3,45,352
April	131	1,60,687	63	92,400	13	45,000	..	..	..	..	260	3,55,207
May	70	78,640	99	1,13,400	26	27,948	14	13,240	..	..	146	2,16,040
June	68	71,700	104	1,17,210	18	28,200	..	..	..	..	207	2,26,288
July	307	3,87,523	58	73,300	13	20,400	..	..	..	..	459	5,32,933
August	128	1,41,880	41	48,030	27	38,988	6	6,748	..	..	199	2,35,580
September	71	78,216	70	83,760	5	9,000	..	..	..	..	145	1,71,982
October	44	45,795	177	2,25,018	7	8,400	..	..	..	..	119	1,38,555
November	32	40,168	72	88,800	..	..	..	..	..	..	216	2,73,586
December	310	3,61,830	985	12,93,838	143	2,52,736	20	19,958	61	96,850	882	4,50,630
	1,655	20,45,222									2,900	~~3,76,654~~
1883.												
January	325	3,76,535	47	67,680	61	95,400	..	..	81	1,00,784	514	6,40,399
February	108	1,22,490	26	37,680	..	..	11	8,500	..	..	145	1,68,670
March	211	2,84,400	237	3,47,520	36	50,032	30	35,051	..	..	511	7,17,003

To His Excellency the Most Honourable the MARQUIS of RIPON, K.G.,
P.C., K.C.B., G.M.S.I., Viceroy and Governor-General of India.

RESPECTFULLY SUEWETH,—That the Association has learned with surprise and regret, from the letter addressed by the Government of India, Department of Finance and Commerce, to the Government of Bombay, No. 398, dated 16th February 1883, and the papers which accompanied it, that a modification has recently been made in the existing customs tariff of Mozambique which will seriously affect the trade carried on by Bombay with that Colony.

Article 41.—All goods coming from Foreign ports will pay the duties laid down in the respective tables, subject to the following exception :—

Article 41.—Goods coming from Portugal, the adjacent islands on the Portuguese ultramarine possessions, and of national manufacture, shall pay only 60 per cent. of the duties laid down in the tariff, excepting power, arms, and spirits, which shall pay full duty.

That the import duties in Mozambique on cotton goods levied under Schedule A of the Tariff of 1877, the schedules of which were forwarded by H. M.'s Secretary of State for India to the Government of India on the 18th October 1877, and which have now been altered, were as follows:—

	DUTY.		Unit.
	Reis.	Sterling.	
Cotton Textures, closely woven, plain, serged or twisted, including "Cotim," and the same textures wrought up :—			
Ditto Grey, White, including Handkerchiefs ditto ditto :—	90	4'80d.	Kilogramme
Ditto Printed, dyed in the piece or in the thread, including Handkerchiefs....	160	8'53d.	"
Cotton Textures, open or transparent, such as Muslin, Lace, "Tules" and "Filos;" Wairy Cotton Goods such as Balzas and Blankets; Velvet Cottons, Plush, Quilting and others not speccified in the above-mentioned articles, as well as the said textures wrought up.	10	per cent.	<i>ad valorem.</i>
Woollen, Linen, Silk. or any other kind of textures, or mixed with cotton, whatever may be the predominant texture, as well as the said textures wrought up	10	per cent.	"

That the trade between British India and Mozambique, which is composed principally of cotton piece-goods exported from British India to Mozambique, and of ivory imported from Mozambique into India, has, during the last five years, shown a fairly progressive increase: the total quantity of Indian-made cotton piece-goods exported from Bombay alone to Mozambique, and the adjoining territory, belonging to the Portuguese Government, in the 12 months ending 31st March 1883 being 3,276 packages, estimated to contain 4,126,873 yards, against 2,871,995 yards exported from the whole of British India in the year 1881-82, 6,336,531 yards in 1880-81, 2,341,643 yards in 1879-80, and 2,034,454 yards in 1878-79. The largest items of the goods so exported are grey cotton piece-goods, the trade in which is, your Memorialists understand, competed for in Mozambique by Indian and American manufacturers, and coloured goods, which are principally of English make. Indian grey cotton goods are preferred by the natives, as being cheaper and more durable.

That the effect of the additional duty of 20 per cent. which the modification in the tariff imposes only on Indian cotton manufactures imported into Mozambique, and not on the cotton manufactures imported from England, America and other countries, will be to very greatly diminish, if not to entirely extinguish, the trade.

That your Memorialists are totally unable to account for the action of the Portuguese Government in imposing an almost prohibitive differential duty on the cotton manufactures of a friendly nation, unless indeed it be that it springs from national antipathy, or from jealousy of the prosperity and enterprise of India, for no cotton spinning and weaving mills are yet established in Mozambique or in Portugal, which that Government might wish to protect, and if an increased import duty had been necessary for revenue purposes, it would naturally have been imposed on goods imported from all foreign countries alike.

That the Treaty of Commerce and Extradition between Her Majesty and the King of Portugal, ratified August 6th, 1879, was formed to draw closer the ancient ties of friendship which united the two nations, and to improve and extend the relations of commerce between their respective dominions, and their Majesties resolved, with these objects, to establish a Customs Union between the possessions of their respective Crowns in India. Reciprocal freedom of commerce, navigation, and transit, between their respective Indian dominions, is provided for, and the subjects of each of the High Contracting parties are entitled to all the privileges accorded to the subjects of the other, and are not liable to any general, special, or local, imposts whatever except those which are or may be imposed on such subjects. Under Article 7 of the Treaty the Customs duties then levied on the frontier lines were abolished, and other restrictions on articles of commerce removed, in order, it is stated, to carry out the desire of the High Contracting parties that their respective Indian dominions should become one territory in all matters relating to commerce. In the face, however, of this Treaty, an additional duty so heavy as to be almost prohibitive, and conceived in so hostile a spirit as to be specially directed against

Indian cotton manufactures, the cotton goods of other countries being left untouched, is levied at Mozambique, although its trading relations with India have existed from remote antiquity, and although it has practically always been regarded as part of the commercial system of India. Its shores are washed by the same sea, and its trade, which is principally with Bombay, is carried in the same native craft as the coasting trade of India.

That Customs duties of every kind are opposed to the free-trade policy of England, which has been sanctioned by Parliament and adopted by the Government of India, and a duty in every respect so objectionable as the one now complained of will, your Memorialists believe, be regarded by those august bodies as totally indefensible; and your Memorialists earnestly hope that your Excellency will urge the Government of India, and, if necessary, Her Majesty's Government to make such remonstrances with the Government of Portugal as will induce them to cancel the modification of the Customs Tariff of Mozambique above referred to.

And your Memorialists, as in duty bound, will ever pray.

For, and on behalf of, the Bombay Millowners' Association,

DINSHAW MANOCKJEE PETIT, Chairman.
J. GORDON, Secretary.

BOMBAY CHAMBER OF COMMERCE, 28th April, 1883.

To the UNDER-SECRETARY to GOVERNMENT, Revenue Department,
Bombay.

SIR,—I am directed to acknowledge the receipt of your letter No. 1765, of the 2nd March last, with its accompaniments, regarding a modification recently made in the existing customs tariff of Mozambique, and requesting that His Excellency the Governor in Council may be favoured with the views of the Chamber on the subject after consultation with the principal local firms interested in the trade of Mozambique.

On receiving this communication, the Committee forwarded the papers to the Millowners' Association, the interest which will be chiefly affected by the modification in question; and at the request of the Association the Committee have now the honour to enclose a memorial which that body has addressed to His Excellency the Viceroy on the subject, and to request that His Excellency will kindly favour the Chamber by transmitting it to His Excellency the Viceroy. The Committee concur generally in the views set forth in the memorial, which they desire to commend to the immediate and favourable consideration of Government.—I have, &c.,

J. GORDON, Secretary.

No. 4467-A OF 1883.

REVENUE DEPARTMENT,
BOMBAY CASTLE, 13th June, 1883.

To the SECRETARY to the CHAMBER of COMMERCE, Bombay.

SIR,—With reference to your letter dated 30th April, 1883, I am directed to forward herewith a copy of the papers, noted in the margin, from which the Chamber will perceive that the Portuguese Government have refused to assent to the alteration in the customs tariff of Mozambique proposed by the Government of the Mozambique.—I have, &c.,

Letter from the Government of India, No. 1223, dated 31st May 1883, with accompaniments.

J. MONTEATH,
Acting Under-Secretary to Government.

No. 1223.

GOVERNMENT OF INDIA.
DEPARTMENT OF FINANCE AND COMMERCE.

SIMLA, 31st May, 1883.

To the SECRETARY to the GOVERNMENT of BOMBAY, Revenue Department.

SIR,—With reference to your letter No. 3654, dated the 12th May, regarding the effect of the modification proposed in the customs tariff of Mozambique, on the trade of Bombay with that Colony, I am directed to state, that in reply to a communication made to the Secretary of State in February last, the Government of India has been informed that the Portuguese Government has refused to assent to the alteration proposed by the Government of Mozambique by which an additional duty of 20 per cent. *ad valorem* was to be levied on all goods of, or similar to those of, European origin which are not brought to Mozambique either direct from the place of origin, or from one of the Portuguese possessions in India. Copies of the despatch to the Secretary of State and of his reply are enclosed.

2. I am to request that this decision may be communicated to the Bombay Millowners' Association, with reference to their memorial, dated the 28th April 1883.—I have, &c.,

J. E. O'CONNOR,
Assist. Secretary to the Govt. of India.

No. 20 of 1883.

GOVERNMENT OF INDIA.
DEPARTMENT OF FINANCE AND COMMERCE.
SEPARATE REVENUE, &c.
Customs.

CALCUTTA, 20th February, 1883.

To the Right Hon'ble the EARL of KIMBERLEY, Her Majesty's Secretary of State for India.

MY LORD,—We beg to enclose copy of a letter from Her Majesty's Agent and Consul General at Zanzibar, advising the Government of

India of a new Article which has been substituted, from the 1st of January last, in the customs tariff of Mozambique, by which an additional customs duty of 20 per cent. *ad valorem* will be levied upon all goods of European origin, or similar to goods of European origin, not brought direct from the place of origin to Mozambique, or carried thither from one of the Portuguese possessions in India. The tariff is an enclosure of the Marquis of Salisbury's despatch of the 18th October, 1877, No. 14-F Statistics and Commerce.

2. We believe that the additional duty will prove prejudicial to the trade between British India and Mozambique, which, as your Lordship will perceive from the enclosed statement, is of some importance. It consists to a great extent of the shipment from Bombay of Manchester cottons and of Indian cotton goods, the imports from Mozambique consisting mainly of ivory and of gold.

3. We trust that your Lordship will consider the expediency of a protest being made against the additional duty, which appears to be intended as a discouragement to the trade of Bombay with Mozambique, and to protect goods carried thither from the Portuguese possessions in India. Considering the advantages which these possessions have derived from the commercial treaty between Governments of Great Britain and Portugal, and the ready way in which we have met every request made by the Portuguese Governor-General, we think that a representation on the subject may with propriety be made.

4. We have asked the Government of Bombay to ascertain what are the particular local interests which will be affected by the duty, and we propose to address your Lordship again on receipt of a reply from that Government.—We have, &c.,

RIPON.
D. M. STEWART.
J. GIBBS.
E. BARING.
T. F. WILSON.
C. P. ILBERT.
T. C. HOPE.

No. 66.

INDIA OFFICE, LONDON, 26th April, 1883.

To His Excellency the Most Honourable the GOVERNOR-GENERAL of INDIA in COUNCIL.

MY LORD MARQUIS,—In reply to your letter, dated the 20th February, No. 20, (Separate Revenue), relative to a new Article inserted in the customs tariff of Mozambique by which an additional duty of 20 per cent. *ad valorem* was to be levied on all goods of, or similar to those of, European origin which are not brought to Mozambique either direct from the place of origin or from one of the Portuguese possessions in India, I have to inform you that the Portuguese Government has refused its assent to the proposed alterations in the tariff.—I have, &c.,

KIMBERLY.

APPENDIX W.

TASAR SERI-CULTURE IN THE BOMBAY PRESIDENCY.

No. 2 OF 1883.

POONA, 14th February, 1883.

From Major G. COUSSMAKER, Superintendent, Government Photographic Office, to the SECRETARY TO GOVERNMENT, General Department.

SIR,—I have the honour to submit for the consideration of Government the progress made in tasar seri-culture in this Presidency during the past year. This is the last report which I shall make on the subject, as I am about to leave India for good, and I regret to have to state that I cannot recommend Government to continue these experiments, as there seems very little prospect of their proving remunerating, owing to three causes—

- (1) A very large supply of wild silk is now exported from China, and the price of "tasar waste" has in consequence fallen to 1s. 3d. per lb. in England.
 - (2) The tasar cocoons of the Bombay Presidency are smaller and contain less silk than those found in other parts of India.
 - (3) The expense of collecting the cocoons, or of rearing the worms in a state of semi-domestication, as I have done is great.
2. My collection this year consists of—

12,800	received from Revenue Officials and other sources.
6,553	do. the Forest Officials.
5,678	reared by myself.

Total...25,031 cocoons weighing 57½ lbs.

3. My plantation has been largely increased. It now consists of several hedges of *Lagerstrœmia* measuring in all 1,500 feet, while of *Zizyphus* there are 300 feet.

4. My expenditure during the year amounted to Rs. 168-13-9, to which is to be added the sum of Rs. 67-10-5 not included in last year's account, as mentioned in para. 9 of my letter No. 2 of 3rd February 1882: The detailed account of these sums, amounting to

Rs. 236-8-2, has as usual been submitted to the Accountant-General, leaving Rs. 263-7-10 unexpended out of the Rs. 500 received.

5. In para. 4 of my No. 2 of 3rd February 1882, I mentioned that I had sent home to Mr. Wardle the collections which I had made in two years. He sold these cocoons, weighing altogether 197 lbs., to Messrs. Clayton, Marsdens and Co., of Halifax, at 1s. 3d. per lb. and sent me the money which amounted to Rs. 146-14-0. The spinners report that "the fibre from these cocoons is somewhat coarser than most tasar waste, and the cocoons have been opened; but this is not a serious drawback to its spinning qualities. China is now sending over such large quantities that the price of tasar waste is very low."

6. I do not think that the cocoons can be collected from the forests at a cheaper rate than 4 annas per hundred, and this is too high to admit of any profit. The collections made have fallen off considerably, and it is only through the personal exertions of the officers and the guards of the Forest Department that I have received as many as I have. I found the same thing myself when I was out in the districts. In whatever village I was encamped, I could get the children to collect for me, but the price was not high enough to induce men to leave their ordinary work and look for cocoons. The village trader took no interest at all in the matter.

7. I have tried, nearly every year, to increase the size of the cocoon, by importing some of the large variety from Sambalpur, Yamtasa, Manbhoom, &c., but with no success. The moths have paired readily with the small Deccan variety, the worms have hatched out, but there has been no difference in the cocoons, and I believe that the climate is the unsurmountable obstacle, though perhaps the difference of food may be another cause.

8. As far as quantity is concerned the result of rearing the tasar silk-worm in semi-domestication is most satisfactory. I have now been able to gather within 6 weeks 3 cocoons per running foot of hedge. My first worm, this last season, was hatched on 9th May, and the first cocoon was gathered in 32 days time. Of this particular batch of worms I took careful notes; they numbered 380, and 347 of them spun cocoons, commencing on 7th June and ending on the 24th idem. They consumed 110 running feet of hedge, a few feet of which consisted of cuttings that had been kept growing for a twelve month; but the greater part of their existence was spent on a *Lagerstroemia* hedge, which on the 1st May had been cut down to 2 feet in height, cleared of every twig and vestige of a leaf, irrigated every third day, and enclosed within tarred screens of split bamboo, over which a coarse cotton covering had been stretched on rattan hoops; as fast as this hedge was eaten off, it sprouted again, and by the time the worms had reached the far end, the new shoots on the first tree were covered with leaves.

9. Of the 1,800 feet of *Lagerstroemia* and *Zizyphus* which I have now got, one half was sufficiently grown to yield a steady supply of food, and off this extent of hedges I gathered in May-October 5,678 cocoons; but, as in former years, I noticed that only 50 per cent. of these were sound and perfectly formed, and these were almost all gathered before the end of July. Later in the season I lost, without any apparent cause, many hundreds of worms in all stages; some being the progeny of moths of the former year and some of this under

review. Still there were many cocoons spun, some of which were very fine, but the majority were weak and thin.

10. The above fact tallies with what I have noticed in my former partial experiments ; with what I gather from the letters which I have received during the last 7 years ; and with what appears in the various printed reports on tasar sericulture, i. e. no reliance can be placed upon any but the first crop of the season, the progeny, that is of moths which have rested during the cold and hot seasons on their cocoons, and which emerge early in the monsoon when the first showers of rain fall. Throughout the whole monsoon and often at other times when disturbed, the moths continue to appear but with an unsatisfactory result, and there is much loss of life. Enough cocoons are spun to ensure a supply of seed cocoons for the next season, it is true, but not enough to call a crop.

11. My collections comprise these late cocoons as well as those of the early crop, and in cleaning all that I have prepared for the manufacturers I have rigorously discarded everything but silk. The exuviae of caterpillars and chrysalides, leaves and twigs of trees, have all been extracted. Partly on this account and partly because the tasar cocoon is naturally small in the Bombay Presidency, I find that the average number of clean cocoons in one pound is 436.

12. My method of protecting the worms and ensuring a steady supply of food is most effective. The labour bill is reduced to a minimum ; one woman and one boy can easily look after an acre of hedge if not more, and keep the enclosures in repair ; but it must be borne in mind that if the monsoon does not break early and heavy, it will be necessary to water the hedges, and also the expense of enclosing is so very heavy, that as long as the price of tasar keeps low this system cannot with profit be followed. In the neighbourhood of dwellings crows, sparrows, squirrels and rats will collect and must be kept out ; this I succeeded in doing with material always available in India, but it is an expensive process. I used bamboo, buying it and making it up into chicks or screens at Rs. 2 per 100 square feet ; rattans, of which 10½ feet weigh one pound, at Rs. 3 per 1 lb. ; coarse cotton cloth at Rs. 2-2 per 11 running yards ; iron rods, 2 inches in circumference, at Rs. 4 per 100 feet ; common country string and tar ; but at these rates the enclosing of an acre of hedge costs an initial outlay of Rs. 3,915-12, with a yearly expenditure of Rs. 305 to keep it in repair, and at the present price of tasar waste only Rs. 23 can be expected from the 20,205 cocoons which an acre of hedge would yield. I am here calculating for the one good crop which would only be on the ground or rather on the hedge between 1st May and 31st July ; but the land would for nine months of the year be available for other crops. Perhaps some other experimentalist will be able to hit upon a cheaper method of enclosing.

13. I have only attempted the collection of tasar waste ; it is most probable that the production of perfect dry cocoons ready for the reeler, or reeled raw silk may be more remunerative ; but the first problem I set myself was "How to procure a steady supply," and until I had solved that I had determined not to attempt anything more. Ten years ago Messrs. Lister & Co., of Bradford, in a letter to me on the subject, wrote : "It will pay you best to let all the moths

fly and sell the burst cocoons." I think that it is apparent from what I have mentioned already in this report that the production of burst cocoons, i. e. tasar waste, will not pay. With reference to the other forms in which tasar may be brought into the market, I can only relate what experts have told me :—

- (1) The preparation of whole cocoons for the reeler :—The chrysalides inside the cocoons must be thoroughly dried as well as killed; they are very large and contain much fatty matter, so it will be difficult to desiccate them without spoiling the silk. Spinners in England have informed me that one serious drawback to Indian tasar was its offensive smell, which in all probability arose from its having been reeled off putrefying chrysalides. The workmen in consequence were not inclined to take much pains with material which was often foul and disagreeable to handle.
- (2) In reeling raw tasar silk it must be borne in mind that the fibre is naturally flat with a twist in it, not round like that of the mulberry silk, and the consequence is that any carelessness in twisting, or in varying, the number of cocoons, at once makes a marked difference in the thread of the skein. So carelessly done is the work in India that the silk spinners showed me a considerable quantity which they had had to re-throw, and said that so much time was taken up in sorting the skeins, and, as then happened to be the case, in re-reeling, that the price was lower than it should be properly seeing that such beautiful and costly fabrics are made from it.

I do not profess to lay down any rules for carrying out these two phases of tasar industry successfully; they can only be worked out by experiments based on enquiries made from the manufacturers. All that I have done is to work out the natural history of the insect; and as my experiments progressed, feeling dubious as to the pecuniary value of the cocoons, I have ever declined to encourage the idea of starting a company, or of soliciting Government to devote any large sum of money, or to give up any land to the formation of a plantation.

14. I take this opportunity of putting on record some information which Mr. Wardle has kindly placed at my disposal regarding the bleaching of tasar silk. It is well known that the great objection to this silk was its natural colour and reputed inability to take dye satisfactorily. Mr. Wardle has made a persistent series of experiments to overcome these defects, and informs me that he has now perfectly succeeded and there will always be a demand for clean, evenly reeled tasar silk thus bleached. His method is as follows :—Mix in water well impregnated with soft soap, carbonate of soda crystals equal in weight to one-quarter of the silk to be bleached, and immersing the silk, boil it for a little more than half an hour. Then wash it thoroughly first in hot and afterwards in cold water, until it is perfectly clean. Next put it into a narrow deep vessel, and having added a few drops of ammonia to the liquid peroxide of hydrogen, so as to make it alkaline, pour it over the silk, until it completely covers it. The silk while undergoing this treatment must be kept perfectly in the dark, and if the peroxide does not remain alkaline, a little more

ammonia must be added. Keep the silk in this state for 24 hours, then heat up the mixture, till its temperature reaches 120° - 130° Fahr., and let it remain at this heat for 12 hours, when it will be found that the silk has become bleached.

He also gives the following instructions for preparing peroxide of hydrogen:—Mix one part of hydrochloric acid with six parts of water. Add to this, *very gradually very finely powdered* Barium dioxide (commercial), until the acid is *almost* neutralized. Stir the liquid all the time, taking care not to add the Barium quickly for fear of raising the temperature. Next add Baryta water, a concentrated solution of Barium monoxide, to the mixture. At first a dirty-looking brown precipitate will be formed, showing that the oxides of iron or other metals which exist as impurities in the commercial Barium dioxide are being got rid of. In a short time, carefully watching through the sides of the glass vessel in which you are making the preparation, you will see that a white precipitate is beginning to form; directly this appears, pour off the liquid into a clean glass vessel, filtering it at the time and continue to add the Baryta water *very gradually*, as long as any precipitate forms; you can tell when this stops by taking a drop out, and adding Baryta water to it, if it has no effect you will see that no more precipitate will fall in the bulk.

Let the white crystalline precipitate stand for a short time, and then pouring off the liquid add a little pure water, and pour off that also. Repeat this operation several times, so as to be sure that the precipitate is thoroughly cleansed, adding less and less water each time, till the pure precipitate alone remains.

Take 7 or 8 parts of pure water and one of the purest sulphuric acid available, mix them and let them get *perfectly cool*.

When quite cool, add the white precipitate very gradually until the mixture is neutralized, great care being taken to let the precipitate fall in slowly and uniformly to settle at the bottom of the vessel. If the liquid be at all discoloured, filter it again. This makes the pure solution of peroxide of hydrogen, which must be decanted into stone jars and put away till wanted in a cool dark place.

15. As mentioned in para I. of this report, I have now wound up my series of experiments, having year by year reported on what I have learnt, and can only regret that the conclusion is so very adverse to the prospect of the tasar silk industry in this Presidency, and now thanking Government for their patience in allowing me to continue this very interesting study. I solicit instructions as to what is to be done with the balance remaining in my hands, which is

Rs.	a.	p.	
263	7	10	Cash remaining as per para. 4.
146	14	0	Money received for 197 lbs. as per para. 5.
28	10	0	Value of 57½ lbs. as per para. 2.
438	15	10	

16. I have calculated the value of these cocoons according to the price which I received for the 197 lbs. sent home last year, deducting the expenditure on account of freight, baling, &c., and if Government does not object, I propose to purchase them myself, take them with

me to England, and have them worked up in some form for my own use.

17. I have asked the Superintendent of the Central Jail, Yeroda, to take over my plantation of *Lagerstœmia* and *Zizyphus* bushes, together with the bamboo screens, iron rods, &c., which I used for my enclosures, as there is land attached to the jail in which the bushes might be planted, the Head Jailor also having always taken an interest in these experiments. I also ask the Conservator of Forests, Northern Division, from whom I have always received great assistance, to direct his assistants to send any cocoons which they may collect to Yeroda. A very little expenditure in water labour will suffice to keep the plants in good health, and, as they will continue growing, will be available for any future experiments which may be made. If no other use be made of them, they can be planted as hedges in the garden, and as they bear a profusion of beautiful lilac flowers, and when kept trimmed break most luxuriantly into leaf, they will form an ornamental as well as an useful addition to the garden.—I have, &c.,

G. COUSSMAKER, Major.

APPENDIX X.

CRIMINAL PROCEDURE CODE, 1882, AMENDMENT BILL.

CALCUTTA, 22nd February, 1883.

Telegram from SECRETARY CHAMBER of COMMERCE, Calcutta, to SECRETARY CHAMBER of COMMERCE, Bombay.

Meeting of Bengal Chamber held yesterday protests against alteration Criminal Procedure as proposed by Viceroy this ; Chamber earnestly requests your co-operation in opposing this measure which is universally disapproved by non-official Europeans in Bengal.

STATEMENT OF OBJECTS AND REASONS.

Shortly after the Code of Criminal Procedure, Act X. of 1882, was passed, the question was raised whether the provisions of that Code which limit the jurisdiction over European British subjects outside the Presidency-towns to judicial officers who are themselves European British subjects should not be modified. It was thought anomalous that, while natives of India were admitted to the Covenanted Civil Service and held competent to discharge the highest judicial duties, they should be deemed incompetent to be Justices of the Peace and to exercise jurisdiction over European British subjects outside the presidency towns.

2. After consulting the Local Governments, the Government of India has arrived at the conclusion that the time has come for modifying the existing law and removing the present bar upon the investment of Native Magistrates in the interior with powers over European British subjects. The Government of India has accordingly decided to settle the question of jurisdiction over European British subjects in such a way as to remove from the Code, at once and completely, every judicial disqualification which is based merely on race distinctions.

3. With this object the present Bill has been prepared. In section one it amends section 22 of the Code, which provides that only European British subjects can be appointed Justices of the Peace, and gives the Government power to appoint to that office such persons as it thinks fit belonging to the following classes :—

- (a) Members of the Covenanted Civil Service ;
- (b) Members of the Native Civil Service constituted by the rules made under the Statute 33 Vic., cap. 3 ;
- (c) Assistant Commissioners in Non-Regulation Provinces ; or
- (d) Cantonment Magistrates, and being persons invested with the powers of a Magistrate of the first class.

4. The Bill then in section two amends section 25 of the Code, and

makes all Sessions Judges and District Magistrates *ex-officio* Justices of the Peace.

5. Section three repeals so much of section 443 of the Code as limits jurisdiction over European British subjects outside the presidency towns to Magistrates who are themselves European British subjects.

6. Section four repeals the similar provision of section 444 of the Code with regard to Sessions Judges.

7. Lastly, section five repeals section 450 of the Code, which provides for the case where the Sessions Judge of the division within which the offence is ordinarily triable is not an European British subject. The same section of the Bill also repeals so much of section 459 of the Code as provides that that section shall not be deemed to confer on Magistrates and Sessions Judges outside the presidency towns, not being European British subjects, jurisdiction over European British subjects.

C. P. ILBERT.

30th January, 1883.

A Bill to amend the Code of Criminal Procedure, 1882, so far as it relates to the exercise of jurisdiction over European British subjects.

Whereas it is expedient to amend the Code of Criminal Procedure, 1882, so far as it relates to the exercise of jurisdiction over European British subjects; It is hereby enacted as follows:—

Amendment of section 22.

1. For the last clause of section 22, the following shall be substituted:—

“ may, by notification in the official Gazette, appoint such persons as he or it thinks fit, who, being

(a) members of the Covenanted Civil Service;

(b) members of the Native Civil Service constituted under the Statute 33 Vic., cap. 3,

(c) Assistant Commissioners in Non-Regulation Provinces, or

(d) Cantonment Magistrates,

are invested with the powers of a Magistrate of the first class, to be Justices of the Peace within and for the territories mentioned in the notification.”

Amendment of section 25.

2. In section 25, after the words “British India” the following shall be inserted:—

“ Sessions Judges and District Magistrates are Justices of the Peace within and for the whole of the territories administered by the Local Government under which they are serving.”

Amendment of section 443.

3. In section 443, the words “ and an European British subject ” shall be omitted.

New section substituted for section 444.

"444. An Assistant Sessions Judge shall not exercise jurisdiction over an European British subject, unless he has held the office of Assistant Sessions Judge for at least three years, and has been specially empowered in this behalf by the Local Government."

Assistant Sessions Judges who may try European British subjects.

Repeal of Section 450 and of the last sixteen words of section 459.

Construction of Act with Code of Criminal Procedure.

(2) All references to that Code made in enactments heretofore passed or hereafter to be passed shall be read as if made to that Code as amended by this Act.

Saving for existing appointments.

4. For section 444 the following shall be substituted :—

5. Section 450 and the last sixteen words of section 459 are hereby repealed.

6. (1) In this Act "section" means section of the Code of Criminal Procedure, 1882.

7. Nothing in this Act shall affect the validity of any appointment made before the passing of this Act.

BOMBAY CHAMBER OF COMMERCE, 9th March, 1883.

To the SECRETARY to GOVERNMENT, Legislative Department, Bombay.

SIR,—I have the honour to inform you that at a Special General Meeting of the members of the Chamber of Commerce held on the 6th instant to consider the Bill for the amendment of the Criminal Procedure Code which is now before the Council of His Excellency the Governor-General, the following Resolutions were passed almost unanimously, there being only three native members dissentients :—

1. "That in the opinion of this meeting, the Bill for the amendment of the Criminal Procedure Code is, under existing circumstances, uncalled for; and ought not to have been introduced without first eliciting the opinions of the non-official classes whom the proposed change in the administration of the law will affect.

2. "That the following members of the Chamber, namely the Chairman of the Chamber, Mr. M. Mowat, the Hon'ble Mr. Macaulay, Messrs. Bythell, Russell, L. R. W. Forrest and Blascheck, be appointed a Sub-Committee, with power to add to their number, to prepare a memorial to the Viceroy praying that His Excellency may be pleased to abandon the proposed alteration in the law."

It has been publicly announced that His Excellency the Viceroy will state his views at length on the Bill at the meeting of the Legislative Council on the 9th instant, and as neither a detailed account of the proceedings of the meeting nor the memorial can therefore reach His Excellency in time, the Committee have despatched a telegram to the Secretary of the Government of India in the Legislative Department, of which I enclose a copy.—I have, &c.,

J. GORDON, Secretary.

8th March.

Telegram from CHAIRMAN CHAMBER of COMMERCE, Bombay, to the SECRETARY, GOVERNMENT of INDIA, Legislative Department, Calcutta.

At a numerously attended Special General Meeting of the Chamber called to consider Bill amending Criminal Procedure Code, following resolutions were passed almost unanimously, three native members only dissenting.

"That in the opinion of this meeting the Bill for the amendment of the Criminal Procedure Code is, under existing circumstances, uncalled for; and ought not to have been introduced without first eliciting the opinions of the non-official classes whom the proposed change in the administration of the law will affect."

"Special Committee appointed to frame memorial to Viceroy praying abandonment proposed amendment."

Memorial will be forwarded shortly through Bombay Government, but as Viceroy proposes stating his views on subject in Legislative Council on 9th instant, detailed proceedings of meeting and memorial will not reach in time. Chamber respectfully commends resolutions to favourable consideration of Viceroy submitting no real necessity exists for measure nor has any pressure been brought upon Government to introduce it. Measure also considered premature as Bill will affect whole of European community while on other hand affecting status of only a few natives in Bengal and Bombay; further measure pronounced inopportune and calculated to imperil success of other important measures now pending.

No. 1735 OF 1883.

JUDICIAL DEPARTMENT,
BOMBAY CASTLE, 12th March, 1883.

From H. F. ASTON, Esq., Acting Under-Secretary to Government, Bombay, to J. GORDON, Esq., Secretary to the Chamber of Commerce, Bombay.

SIR,—I am directed to acknowledge the receipt of your letter, dated the 9th instant, communicating to Government the resolutions which were passed at a Special General Meeting of the members of the Chamber of Commerce held on the 6th idem, to consider the Bill for the amendment of the Criminal Procedure Code, which is now before the Council of Excellency the Governor-General.—I have, &c.,

H. F. ASTON,
Acting Under-Secretary to Govt.

To His Excellency the Most Honourable the MARQUIS of RIFON, P.C., K.G., G.C.B., G.M.S.I., Viceroy and Governor-General of India.

The Memorial of the Bombay Chamber of Commerce

RESPECTFULLY SHEWETH,—That at a numerously attended General Meeting of the Chamber of Commerce held on

the 6th March 1883, to discuss the Criminal Procedure Code 1882, Amendment Bill, now before the Legislative Council of His Excellency the Governor-General, the following resolutions were passed almost unanimously, three native members of the Chamber only dissenting :—

1. That in the opinion of this meeting, the Bill for the amendment of the Criminal Procedure Code is, under existing circumstances, uncalled for, and ought not to have been introduced without first eliciting the opinions of the non-official classes whom the proposed change in the administration of the law will affect.
2. That the following members of the Chamber, namely, the Chairman of the Chamber, Mr. M. Mowat, the Hon'ble W. M. Macaulay, Messrs. Bythell, Russell, L. R. W. Forrest, and Blascheck, be appointed a Sub-Committee, with power to add to their number, to prepare a memorial to the Viceroy praying that His Excellency may be pleased to abandon the proposed alteration in the law.

That the discussion which resulted in the passing of these resolutions is contained in the printed proceedings of the meeting which are appended hereto, and to which your Excellency's attention is respectfully invited.

That the privilege, which Englishmen have hitherto enjoyed of being tried by their own countrymen, is one on which they set the highest value. It has never interfered in any way with the rights of the natives, nor has it occasioned inconvenience to any appreciable extent in the administration of justice.

That the European communities acquiesced in the proposal to confer on Native Magistrates jurisdiction over Europeans in the Presidency towns, in the well-grounded belief, that in those towns there were sufficient safeguards for the efficient performance of the duties of their office. The example of other Judges, the vigilant criticism of an able and influential bar, from whom the Magistrates at the same time receive valuable assistance in arriving at their decisions, and the influence of an intelligent public opinion, were generally felt to be sufficient guarantees against miscarriage of justice. But the case is widely different in the districts of the mofussil, where a few isolated Europeans may have to contend with the prejudices of the surrounding people, who are necessarily ignorant of their customs and feelings. Even in England, in places where feeling runs

high against the accused, it is not uncommon to change the venue in order to secure for him a fair and impartial trial. It is not unnatural for the Native Judge in the mofussil, however able he may be, and anxious to dispense justice impartially, to be to some extent influenced, it may be unwittingly, by the prejudices of his own people; he enjoys none of the advantages which the Natives Magistrates in the Presidency towns possess, while the European who may be brought before him can neither have the assistance of his countrymen to defend him, nor the protecting influence of a strong and enlightened public opinion. Examples indeed are not wanting of the difference between the administration of justice in a place in the interior where an European British subject cannot have counsel to represent him, and where there is no public opinion, and the dispensing of justice in Bombay where there is a strong press and he can employ counsel to defend him.

That the Code of Criminal Procedure was exhaustively discussed in 1872, and after having been in force for 10 years, was last year re-enacted, and came into force on 1st January 1883. A variety of alterations and amendments were introduced into the new Code, after it had been submitted to the different Local Governments for their opinions, but no alteration was made in that part of it which related to European British subjects. This, your Memorialists respectfully submit, in itself showed that no practical reason, no real urgency, existed to justify the withdrawal of what is perhaps the only legal privilege which European subjects in India possess against many, on the same principle, which Natives of rank and influence enjoy.

That in the discussion in the Legislative Council on the 9th of March, your Excellency was pleased to admit that at present there is no irresistible necessity for introducing this measure, although it might be an inconvenience to the administration of justice and a hardship to suitors if the present state of things were allowed to exist. And the Hon'ble Mr. Gibbs cited as an example Carwar (where Mr. Tagore was Sessions Judge), in the neighbourhood of which large railway works were being commenced. These works would, he said, bring European British subjects in considerable numbers into that district; and, if they were not tried by the Sessions Judge, they would either have to be sent by sea to Bombay, or have to march 80 or 100 miles through a district which at many times of the year

was injurious to health. The illustration was an unhappy one inasmuch as the Railway referred to is being carried inland from Marmagao through Portuguese territory, and not from Carwar. Supposing, however, a large number of Europeans had been attracted to the Carwar collectorate by the construction of a railway, your Memorialists submit that it would have been preferable to have appointed an European Magistrate to the district, instead of altering the law of the land to meet an isolated and exceptional case such as the one in question.

That in a country such as India, whose population is composed of so many different races, languages, and religions, it is in the highest degree impolitic to introduce fundamental changes in the law, affecting large and important sections, unless such changes are justified by urgent necessity, and your Memorialists are of opinion that any such change now is premature, and uncalled for.

That it has always been regarded as of great importance to the Government that harmony should exist between the Government and the general European population, and it is much to be regretted that Government did not take the precaution to elicit an expression of their opinion before the proposed Bill was introduced into the Legislative Council of His Excellency the Governor-General.

Your Memorialists therefore respectfully pray that your Excellency may be pleased to abandon the proposed alteration in the law.

And your Memorialists, as in duty bound, will ever pray.

At the request, and on behalf of the Memorialists,

JAMES THORBURN,
Chairman, Bombay Chamber of Commerce.

J. GORDON,
Secretary, Bombay Chamber of Commerce.

Bombay, 22nd March, 1883.

BOMBAY CHAMBER OF COMMERCE, 31st March, 1883.

The SECRETARY TO GOVERNMENT, Legislative Department, Bombay.

SIR,—I am directed by the Committee of the Chamber of Commerce to forward herewith the memorial of the Chamber to the Viceroy praying that His Excellency may be pleased to abandon the Criminal Procedure Code, 1882, Amendment Bill, now before the Legislative Council of the Governor-General; and to request that

His Excellency the Governor in Council will kindly favour the Chamber by transmitting the memorial to His Excellency the Viceroy.—I have, &c.,

J. GORDON, Secretary.

No. 2352 OF 1883.

JUDICIAL DEPARTMENT,
BOMBAY CASTLE, *5th April*, 1883.

From C. G. W. MACPHERSON, Esq., C.I.E., Under-Secretary to Government, Bombay, to the SECRETARY to the CHAMBER of COMMERCE, Bombay.

SIR,—I am directed to inform you that the memorial of the Chamber of Commerce, forwarded with your letter, dated the 31st ultimo, has been transmitted to His Excellency the Viceroy and Governor-General of India, as requested.—I have, &c.,

C. G. W. MACPHERSON,
Under-Secretary to Government.

No. 2260 OF 1883.

JUDICIAL DEPARTMENT,
BOMBAY CASTLE, *2nd April*, 1883.

From C. G. W. MACPHERSON, Esq., C.I.E., Under-Secretary to Government, Bombay, to the CHAIRMAN of the CHAMBER of COMMERCE, Bombay.

SIR,—I am directed to forward herewith copy of a letter from the Secretary to the Government of India, Legislative Department, No. 24-C, dated the 17th instant, and of a Bill to amend the Code of Criminal Procedure so far as it relates to the exercise of jurisdiction over European British subjects, together with the Statement of Objects and Reasons which accompanied it, and to request that you will be so good as to favour Government with your opinion on the provisions of the Bill.

2. I am at the same time desired to request that your opinion may be forwarded to Government by the 15th June next.—I have, &c.,

C. G. W. MACPHERSON,
Under-Secretary to Government.

No. 24-C.

FORT WILLIAM, *17th March*, 1883.

From D. FITZPATRICK, Esq., Secretary to the Government of India, Legislative Department, to the CHIEF SECRETARY to the GOVERNMENT OF BOMBAY.

SIR,—I am directed to forward herewith twenty copies of the papers,

Bill to amend the Code of Criminal Procedure, 1882, so far as it relates to the exercise of jurisdiction over European British subjects, with Statement of Objects and Reasons,

noted in the margin, and to request that His Excellency the Governor in Council will favour the Government of India with an expression of his opinion on the

provisions of the Bill, and with the opinions of the Hon'ble the Judges of the High Court, Bombay, and of such other persons as His Excellency in Council may think fit to consult on the subject.

2. I am also to request that the Bill and Statement may be published in the *Bombay Government Gazette* in English, and in such other languages as His Excellency in Council may deem proper, and that the dates of publication of both may be communicated in your reply.

3. The reply to this letter should be sent in by the 15th July 1883.—I have, &c.,

D. FITZPATRICK,
Secretary to the Government of India.

BOMBAY CHAMBER OF COMMERCE, 12th April, 1883:

To the UNDER-SECRETARY to GOVERNMENT, Judicial Department,
Bombay.

SIR,—I am directed to acknowledge the receipt of your letter No. 2260, of the 2nd instant, forwarding a letter from the Government of India, Legislative Department, No. 246, dated the 17th March last, and of a Bill to amend the Code of Criminal Procedure, with the Statement of Objects and Reasons which accompanied it, and requesting that Government may be favoured with the opinion of the Chamber on the provisions of the Bill.

The proposed amendments were discussed at a General Meeting of the Chamber held on the 6th of March last, and the proceedings of the meeting and the memorial of the Chamber thereon, dated 22nd idem, were duly forwarded to Government.

The Committee direct me to say that if any further expression of opinion is wanted now, or may be desired hereafter, the Chamber will be happy to furnish it.—I have, &c.,

J. GORDON, Secretary.

APPENDIX Y.

SAMPLES OF MAHABLESHWAR ARROWROOT.

No. 20 OF 1883.

GENERAL DEPARTMENT,
BOMBAY CASTLE, *4th January*, 1883.

To the SECRETARY CHAMBER OF COMMERCE, Bombay.

SIR,—With reference to Mr. Acting Under-Secretary Acworth's letter No. 2173, dated 8th July 1881, I am directed to forward, for the information of the Chamber, the accompanying copy of a letter from the Commissioner, C. D., No. R-5953, dated 14th ultimo, with enclosures, showing the result of the experiment as to the reproduction of arrowroot undertaken at Mahableshwar in accordance with orders issued by Government in July 1881.—I have, &c.,

J. MONTEATH,
Acting Under-Secretary to Government.

No. $\frac{R}{5953}$ OF 1883.

GENERAL DEPARTMENT,
KHANDESH DISTRICTS, CAMP RANGOON, *14th December*, 1882. •
From E. P. ROBERTSON, Esq., Commissioner, C. D., to the SECRETARY TO GOVERNMENT. •

SIR,—With reference to the Government Resolution No. 2172, dated 8th July 1881, I have the honour to submit, for the information of

Endorsement from Collector of Satara, No. 954, dated 13th February 1882, and enclosure.

Letter to Collector, No. R, dated 23th February 1882, and enclosure. 810

Endorsement from Collector, No. 7327, dated 20th November 1882, and enclosure.

Government,
copy of the
correspondence, as per
margin, showing the result
of the experiment, as to the reproduction of the arrowroot, undertaken at Mahableshwar in accordance with the orders conveyed in that Resolution.—I have, &c.,

E. P. ROBERTSON, Commissioner, C. D.

No. 164 OF 1882.

MAHABLESHWAR, 7th February, 1882.

To the COLLECTOR of SATARA. ~

SIR,—With reference to your No. 725 of the 2nd instant, I have the honour to report that with a view to carry out the instructions of Government contained in their Resolution No. 2172, dated 8th July last, the ground in the neighbourhood of the Yenna Lake was carefully examined, but no suitable place could be obtained except a piece measuring 12 Gunthas, a short distance below the lake, on the bank of the Yenna stream. The land belongs to the Inamdar of Mahableshwar and is assessed at Rs. 1-8-9. The ground was carefully prepared and planted with Arrowroot in the latter part of the monsoon, but I regret to state the experiment so far seems a failure, though the Chinaman in charge says the roots are still alive and will germinate in the beginning of the monsoon. The original expenditure including the watering of plants up to 1st instant has amounted to Rs. 27-13-6. A further report will be submitted during the rains.—I have, &c.,

McCONAGHY, M.D., Superintendent.

No. 954 OF 1882.

CAMP DAPHLAPUR, 13th February, 1882.

Copy forwarded for the information of the Commissioner, C. D., in reference to the correspondence ending with this office, No. 4586 of 26th July 1881.

W. R. PRATT, Collector.

No. $\frac{R}{840}$ OF 1882.

POONA, 28th February, 1882.

To the COLLECTOR of SATARA.

SIR,—With reference to your memo. No. 954, dated 13th instant, and its accompaniment, I would observe that it is not to be expected that the plants will grow out of season. The time to report result will be after the monsoon.—I have, &c.,

E. P. ROBERTSON, Commissioner, C. D.

No. 999 OF 1882.

MAHABLESHWAR, 22nd November, 1882.

To W. R. PRATT, Esq., Collector Satara.

SIR,—With reference to your No. 1445, dated the 9th March 1882, I have the honour to state that although Rs. 7-8-9, more than the

amount mentioned in this office No. 164 of 7th February 1882, were spent for watering, &c., the Arrowroot plants, yet I see no improvement in them, and the experiment seems, therefore, a failure. I have consequently, in order to save the amount of assessment that will have to be paid to the Inamdar for his land for next year if it is retained any longer, informed him that it is now no longer required.—I have, &c.,

J. DAVIDSON, Superintendent.

No. 7327 of 1882.

CAMP PHALTON, 29th November, 1882.

Copy forwarded to the Commissioner, C. D., with reference to his No. 840 of the 28th February 1882.

W. R. PRATT, Collector.

APPENDIX Z.

THE INDIAN EXPLOSIVES BILL, 1883.

No. 601 OF 1883.

REVENUE DEPARTMENT,
BOMBAY CASTLE, *24th January, 1883.*

To the SECRETARY to the CHAMBER of COMMERCE, Bombay.

SIR,—I am directed to forward herewith copy of a Bill to regulate the manufacture, keeping, sale, conveyance and importation of explosives, together with its accompanying Statement of Objects and Reasons, and to request that you will be so good as to move the Chamber to favour this Government on or before the 15th proximo with any remarks they may desire to offer on the subject of the proposed measure.—I have, &c.,

J. MONTEATH,
Acting Under-Secretary to Government.

STATEMENT OF OBJECTS AND REASONS.

1. The object of this Bill is to provide a comprehensive law regulating the manufacture, keeping, sale, conveyance and importation of explosives throughout British India. The matter was first brought to the notice of the Government in connection with an application made by the agents of Nobel's Explosives Company, Limited, for permission to import dynamite manufactured by the Company. The Government of Bombay, to whom the application was made, referred the question to a Committee, which reported that the expediency of allowing the importation into that Presidency of dynamite and other preparations of nitro-glycerine was doubtful. The Government of Bombay forwarded a copy of this report to the Government of India with a request that the importation of preparations of nitro-glycerine might be prohibited until further notice by a notification under the Sea Customs Act. Before complying with this request the Government of India thought it well to consult the Governments of Madras and Bengal. In reply, both Governments expressed an opinion that the importation of these explosives should not be forbidden. The Government of Bengal further submitted a draft set of rules to regulate the importation, package, transport and storage of dynamite and similar substances, together with a report which had been prepared by a Committee appointed by the Lieutenant-Governor to consider the entire subject. This Committee, while recommending that the draft rules should be published as rules under the Indian Arms Act, 1878, suggested the enactment of a comprehensive Imperial Act of a similar nature to the English Explosives Act, 1875 (38 Vic., c. 17),

which would in a convenient and compendious Code deal with the subject of explosives in its entirety and furnish the public, as well as Government officials, with an easy means of ascertaining their duties, responsibilities and powers respecting articles which by their inflammable, explosive or dangerous nature imperil the public safety.

2. It appears to the Government of India that it would be an abuse of the powers conferred by the Indian Arms Act, 1878, to make rules of the nature of those submitted by the Bengal Committee under that Act. There are, no doubt, powers conferred by the Indian Arms Act which might, at first sight, seem to authorise the making of such rules; but the object to which such rules are directed is altogether different from that of the Act. The object of the Arms Act was to enable the Government more effectually to prevent arms and ammunition (which term under section 4 includes gun-cotton, dynamite, lithofracteur and other fulminating substances) from getting into the hands of persons who would make a bad use of them. In other words, the main object of that Act was to *restrict* the possession of arms and ammunition. But the main object of the rules prepared by the Bengal Committee is not restrictive. Their object is to *protect* the public against the dangerous nature of the explosives to which they relate by regulating all dealings with those explosives. If they are restrictive, it is only so far as is necessary to carry out their protective object. Under these circumstances, it appears to the Government that the proposed rules could not properly be published under the Indian Arms Act, 1878.

3. Nor does it appear that there is any other enactment, as the law at present stands, under which rules of the nature of those prepared by the Bengal Committee can be issued. Under the existing law, the only enactments relating to this subject are to be found in various fragmentary provisions, dealing with gunpowder and fireworks only, which are in force in the Presidency-towns and in certain Municipalities and ports. It appears to the Government that it is unsatisfactory that the law should be in this state at a time when dynamite and other compounds of nitro-glycerine are rapidly taking the place of gunpowder in all works where blasting is necessary. Already these explosives have been used to a considerable extent in connection with various works undertaken both by the Government and by private enterprise throughout India; and it is only natural to suppose that, as their superiority to gunpowder becomes more widely known, their use will increase.

4. Under these circumstances, the suggestion of the Committee that an Act drawn on the model of the English Explosives Act, 1875, and dealing comprehensively with the whole subject of explosives, should be added to the Indian Statute-book, recommends itself to the Government of India, as being the only satisfactory method of treating the subject. Accordingly the present Bill has been prepared. It embodies such of the provision of the English Act as are in the opinion of the Government necessary in this country. In addition to the omission from the Bill of certain provisions of the English Act, the Bill further differs from that Act in that, in accordance with the well-recognized principle of Indian legislation it confers power on the Local Governments, to provide by means of rules, adapted to the varying local circumstances of the provinces under their administration,

for many points for which there are specific provisions in the body of the English Act.

5. The Bill is divided into ten chapters.

Chapter I. (Preliminary) contains the usual preliminary matter. Section 2 saves from the Act the manufacture, packing, sale, conveyance or importation of explosives by the Government, and section 3 saves the provisions of the Indian Arms Act, 1878. Under section 4, the Act will not come into force until after the publication of a notification by the Governor-General in Council ; but, in order to prevent the inconvenience which would arise if the Act were brought into force before the notifications, rules, orders and appointments necessary for its efficient working had been made, sub-section (2) gives power to make these at any time after the passing of the Act, though they are not to take effect until the Act comes into force. By section 5 and the schedule are repealed the enactments which at present deal with the subject-matter of the Bill, with the exception of the Indian Arms Act, 1878, and the provisions to be found in the Andaman and Nicobar Islands Regulation, 1876. The provisions of the former Act relating to explosives have been left unrepealed for the reasons which have led the Government of India to decide that the rules framed by the Bengal Committee cannot be passed under it, namely, because the objects of the Act and of the Bill are different. The provisions of the Andaman and Nicobar Islands Regulation, 1876, have not been repealed because, considering the peculiar nature of that settlement, it seems inconvenient to interfere with any of the rules which are at present contained in that Regulation. Though the proposed Act will extend to the Andamans, its provisions will be practically a dead-letter in these islands.

6. Chapter II. lays down the general law as to the manufacture and keeping of explosives prescribing the places at which an explosive may be manufactured or kept. It is to be read subject to certain exceptions in the supplemental Chapter (X).

7. Chapter III. deals with the licensing and regulation of factories and magazines, and the registration and regulation of registered places, and confers power on the Local Government to make rules on all necessary matters. A factory under the Act is a place licensed for the manufacture of an explosive ; a magazine is a place licensed for the keeping of an explosive ; and a registered place is a place registered for the keeping of an explosive. Magazines differ from registered places in that the former are places devoted exclusively to the keeping of explosives and the receptacles for or tools or implements for work connected with the keeping of explosives, whilst the latter are places, *e.g.*, general stores or shops, not devoted exclusively to the keeping of explosives but in which explosives may be kept. Sections 11 and 12 enact certain provisions in favour of the occupiers of magazines and registered places ; the former section enabling the occupiers of magazines and registered places to make cartridges without taking out a factory-license, and the latter enabling the occupiers of magazines to adapt or prepare explosives for use in their own mines or quarries without any such license. Section 15 imposes on the occupier of a factory or magazine the duty of making special rules for the regulation of the workmen in his factory or magazine.

8. Chapter IV. relates to the sale of explosives. Section 16 pro-

hibits explosives being hawked, sold or exposed for sale on highways or public places ; section 17 prohibits the sale of an explosive to a child under 13 ; and section 18 prescribes the manner in which an explosive exposed for sale or sold is to be packed and labelled.

9. Chapter V. treats of matters relating to the conveyance of explosives. Under section 19, the Governor-General in Council may make rules as to the packing of explosives for conveyance. Under section 20, the Local Government may make rules to regulate the conveyance, loading, unloading and keeping of explosives within a port ; and section 21 confers certain powers on the Conservator or other officer named in such rules in the event of their breach. Under section 22, Railway-administrations are directed to make rules for their own railways respectively. Under section 23, the Governor-General in Council is empowered to make rules in any case in which rules under section 20, or section 22 do not apply. By section 24 the authority making rules under sections 20, 22 and 23 respectively is empowered to annex to a breach of any rule, or attempt to commit a breach of any rule, a penalty which may consist of a fine which may extend to two hundred rupees for each breach and to one hundred rupees for each day during which the breach continues, and of forfeiture of all or any part of the explosive in respect of which the breach is committed.

10. Chapter VI regulates the importation of explosives other than gunpowder, cartridges made with gunpowder, percussion-caps, fireworks, and any prescribed explosive, and prohibits their importation except under a license. The Governor-General in Council is given power (section 26) to regulate all matters connected with the grant of such licenses, and the officers of sea-customs are given similar power (section 27) with regard to these explosives as they have with regard to any article on the importation of which restrictions are for the time being imposed by the law relating to sea customs.

11. Chapter VII. confers special powers on the Governor-General in Council to regulate or prohibit all dealings with any explosive which in the opinion of the Governor-General in Council is specially dangerous to the public safety ; and the officers of sea customs are given like powers with regard to any such explosive as they are given under section 27 with regard to the importation of the explosives referred to in section 25.

12. Chapter VIII. (Government supervision) first provides for matters relating to inspection. The Local Government is empowered (section 29) to appoint Government Inspectors, and to make rules to assign and regulate their duties. Section 30 defines the general power of these officers as to entry, inspection, and examination of factories, magazines and registered places, and the taking of samples from the occupiers. Section 31 empowers the Government Inspector to require the occupier of any factory or magazine to remedy anything connected with his factory or magazine which is in the opinion of the Inspector unnecessarily dangerous or defective, and provides for a reference to the nearest Magistrate when the occupier objects to comply with the Inspector's requisition. Section 32 deals with inspection in ports and of ships, and section 33 provides for the inspection of a wharf, carriage, ship or boat on or in which an explosive is reasonably supposed by a

Government Inspector or other officer to be for the purpose of or in course of conveyance.

The chapter secondly provides (section 34) for the giving of notice of accidents arising from explosion or fire occurring in or about or in connection with any factory, magazine or registered place, or any carriage, ship or boat either conveying an explosive or on or from which an explosive is being loaded or unloaded, and (section 35) for inquiry into the cause of such accidents when necessary.

Thirdly, the chapter deals with power of search. It empowers (section 36) Government Inspectors and officers authorised by the Local Government to enter and search all places where they have reason to believe that any offence has been or is being committed with respect to an explosive, or that any explosive is in contravention of the Act, or that the provisions of the Act are not duly observed. Such searches are to be made in accordance with the Code of Criminal Procedure, and when made by any officer other than a Government Inspector are to be reported by him to his official superior within 48 hours. Section 37 gives special power to Government Inspectors and other officers to stop carriages or boats in case of emergency.

Fourthly, the Chapter treats of seizure and detention of explosives. Section 38 authorizes the seizure and detention of any explosive liable to forfeiture, and section 39 gives the Local Government power to make rules to regulate such seizure and detention. Section 40 declares that the proceedings before a Magistrate with regard to any such seizure shall be commenced as soon as possible. Section 41 gives power to seize the receptacle in which the explosive was found, and section 42 to use the ship, boat, carriage, &c., in which the explosive was seized.

Lastly, the chapter (section 43) provides for the payment for samples of explosives taken by Government Inspectors or other officers under the Act.

13. Chapter IX. deals with the penalties and legal proceedings.

The penalties for breaches of the provisions of the Act and the rules made under it are restricted to forfeitures and fines, and the only instance in which the Act prescribes imprisonment as a punishment is (section 53) that of resistance to a public officer.

14. With regard to legal proceedings, section 64 provides for the exemption of an occupier of a factory, magazine or registered place, and of a warehouseman, carrier or owner or master of a ship, boat, or carriage from penalty on proof of another being the real offender. Under section 65, a carrier or owner or master of a ship or boat is exempted from penalty when he is prevented from complying with the law by the act or default of the consignor or consignee of the explosive or some other person and the consignor or consignee or other person is convicted (as it is provided he may be) under the Act.

Section 66 confers a general power on Magistrates to order forfeiture in all cases in which explosives are liable to be forfeited, and provides that proceedings may be taken for the purpose only of inflicting a forfeiture. The same section empowers the Court to inflict an additional fine in lieu of forfeiture of the explosive; and section 67

provides for levy of a fine imposed on the owner or master of a ship by distress of the ship.

15. Chapter X. (Supplemental) provides for several miscellaneous matters. Section 68 empowers Municipal Committees to provide magazines for the use of the public; section 69 enacts certain provisions in favour of the keeping and conveyance of percussion-caps, safety-fuses for blasting, fog-signals and prescribed explosives, exempts railway-administrations from the obligation to make rules with regard to such explosives, and empowers the Governor-General in Council to exempt such explosives altogether from the Act. By section 70 the filling and conveying for private use, and not for sale, of safety-cartridges are excepted from the application of the Act. Section 71 exempts the owner or master of a ship and a carrier or warehouseman or any person in charge of a carriage from punishment when an act is done by him in breach of the provisions of the Act in a case of emergency. Section 72 contains the usual provision saving liability to civil suit or prosecution under other laws. Section 73 deals with notice and limitation of proceedings. Section 74 empowers the Governor-General in Council to extend the definition of "explosive" to other explosive substances; and sections 75 and 76 treat of general matters connected with the issue and publication of notifications and rules. Under section 75, proposed rules must be published as drafts before they are finally made, and the authority that makes the rules is directed to receive and consider any criticisms or suggestions which may be made by persons interested.

C. P. ILBERT.

Calcutta, 1st January, 1883.

BOMBAY CHAMBER OF COMMERCE, 19th February, 1883.

The SECRETARY to GOVERNMENT, Revenue Department,
Bombay.

SIR,—I am directed to acknowledge the receipt of your letter No. 601 of 1883, dated 24th January last, forwarding copies of a Bill to regulate the manufacture, keeping, sale, conveyance and importation of explosives, with Statement of Objects and Reasons, and requesting that Government may be favoured with the opinion of the Chamber of Commerce on the provisions of the Bill.

The Chamber, having referred the Bill to a Special Committee—consisting of James Tkorburn, Esq., of the firm of Messrs. Sir Charles Forbes & Co., Chairman of the Chamber; the Hon'ble W. M. Macaulay, of the firm of Messrs. Ewart, Latham & Co., Agents for Nobel's Explosive Company; T. W. Wood, Esq., Agent of the B. B. & C. I. Railway Company; G. Ormiston, Esq., Resident Engineer,

Port Trust; R. P. Brunton, Esq., of the Bombay Municipality; and J. L. Mackay, Esq., of the firm of Messrs. Mackinnon, Mackenzie & Co.,—has now the honour to submit its opinion upon it.

The principle of the Bill, which is to protect the public against articles which by their inflammable, explosive, or dangerous nature, imperil the public safety, by regulating all dealings with those articles, has the approval of the Chamber.

The Bill is drawn on the model of the English Explosives Act, 38 Vict., Cap. 17, 1875; but with this great and important difference that, whilst in the English Act the provisions regulating those dealings are specified therein, no such provisions are embodied in the Indian Bill, but powers are conferred on the Local Governments to provide by means of rules for the whole working of the measure. The working of the proposed law will consequently depend entirely on the nature of the Rules framed under the Act by the Local Government and His Excellency the Governor-General in Council, and no opinion which the Chamber can at present offer either as to the necessity or otherwise of the restrictions which may be imposed by these Rules, or the extent to which such restrictions may interfere with the trade, can be of any value until the Rules are submitted to the Chamber. The Chamber, therefore, while expressing its hope that the Rules will never be such as unnecessarily to interfere with trade, desires strongly to urge upon Government the desirability of all Rules framed under the Act being submitted to the Chamber before they are published as drafts in the Official Gazette, under Section 75 of the Act, and confirmed by His Excellency the Governor-General in Council.

The Bill extends to the whole of British India, and provides for the appointment of Special Officers by Government to carry out its provisions. This may be desirable in other parts of India, but while the Chamber is of opinion that such officers should be bound to consult the local authorities of every Municipality before licensing places for the manufacture or storage of explosives within its limits, it submits that, so far as the large city of Bombay is concerned, with its narrow streets and crowded thoroughfares, it would be expedient for the public safety if the control of the local manufacture and storage of explosive were

vested, as at present, in the Municipal authority, and that of the conveyance of explosives through the city in the Commissioner of Police, who are directly responsible for the safety of the city; and that, in all other respects, the working of the Act, so far as Bombay is concerned, should be placed under the Commissioner of Police.

With these preliminary observations, the Chamber proceeds to offer its suggestions on such of the provisions of the Bill as appear to it to call for remark.

Section 3.—The saving of the Indian Arms Act, 1878, as appears to be here contemplated, from the operation of the proposed Bill, will have the effect of requiring persons who, under Section 5 of the Arms Act, manufacture, convert or sell, or keep, or offer, or expose for sale, and persons who, under Section 6 of the same Act, bring or take by sea or by land into or out of British India, any arms, ammunition, or military stores, to obtain in each case a double license, and consequently in each case to pay a double license fee for the same explosive, inasmuch as similar licenses are required to be obtained in each case under the proposed Indian Explosives Bill, and for each license it is proposed that a fee should be levied. The Chamber recommends that, with regard to licenses and the fees to be charged for licenses, the wording of this section should be so modified as to provide that when a license is obtained under the Arms Act, it shall not be necessary to take out a similar license for the same article under the Explosives Act.

Section 6.—The limitation which it is here proposed to apply to Section 225 of Bombay Municipal Act III. of 1872 removes the control of the manufacture or storage of explosives from the Municipal authority, who, it seems to the Chamber, is the proper authority in whom such power within the Municipal limits of Bombay should be vested. The Chamber is therefore of opinion that, so far as Bombay is concerned, this control should, as heretofore, remain with him, and that Section 6 should be so modified as to admit of this authority being continued.

Sections 10, 13, 14, 20, 23, 26.—As the working of the Act will depend entirely on the Rules made under the Act, the Chamber recommends that all the Rules which may be made by the Local Government, or by His Excellency the Governor-General in Council, be submitted to the Chamber before the drafts of the Rules are published in the Official

Gazette and confirmed by the Government of India, and that, so far as Bombay is concerned, the Rules to be made by the Local Government under Section 13, relating to the licensing and regulation of magazines, be also submitted to the Municipal authority and to the Trustees of the Port of Bombay, on whose property it is probable that places for the keeping of explosives may be located; that the Rules, under Section 14, relating to the registration and regulation of registered places, be also submitted to the Municipal authority, who, the Chamber thinks, should have, as at present, control of the manufacture or storage of explosives within the Municipal limits of Bombay; and that the Rules under Section 20 for regulating the conveyance of explosives, more particularly the matters referred to in sub-section (g) of that section, so far as Bombay is concerned, be also submitted to the Commissioner of Police, in whom the control of the conveyance of explosives through the city of Bombay should, the Chamber thinks, as at present, remain.

Section 29.—The Chamber is of opinion that, so far as the city of Bombay is concerned, the working of the Act, except so far as regards the manufacture or storage of explosives as above mentioned, should be placed under the Commissioner of Police.

Section 39, para. (c).—The Chamber is of opinion that this sub-section is too wide in its scope, and might be arbitrarily used.

Section 43.—The Chamber desires to record its objection to the principle contained in this section. It seems to them to be hard to compel the owner of an explosive to receive in payment for samples such amount as the Government Inspector or other officer may consider to be the market value thereof, and if the amount tendered should be less than the real value of the samples, to sue the inspector, or other officer taking the samples, for the difference, as a debt, in Court.

Section 69 para. (1).—The Chamber recommends that after the word “blasting,” in the sixth line of this paragraph, the words “blue or other lights for ship signals,” be inserted.

The Schedule (c), Acts of the Governor of Bombay in Council.—Should the control of the manufacture or storage

of explosives in the city of Bombay be vested in the Municipal authority, as recommended by the Chamber, the extent of the repeal of the Bombay Municipal Acts, here proposed, may require modification.

In conclusion, the Chamber desires respectfully to express its hope that, as Government have been pleased to request the opinion of the Chamber on the provisions of the Bill as it now stands, if any important additions or alterations are made to the Bill, such additions or alterations also may be submitted for its opinion.—I have, &c.,

JAMES THORBURN, Chairman.
J. GORDON, Secretary.

APPENDIX AA.

THE INDIAN STEAM-SHIPS BILL, 1883.

No. 153 OF 1883.

MARINE DEPARTMENT,
BOMBAY CASTLE, 6th April, 1883.

From the SECRETARY to GOVERNMENT to the SECRETARY BOMBAY
CHAMBER OF COMMERCE.

SIR,—In forwarding herewith a copy of a Bill to amend the law relating to the Survey of Steamships and the Examination and Grant of Certificates to Engineers of those ships and of a Statement of Objects and Reasons, I am directed to request you will have the goodness to favour Government, on or before the 20th May next, with the views of the Chamber on the Bill.—I have, &c.,

M. W. WILLOUGHBY, Colonel,
Secretary to Government.

STATEMENT OF OBJECTS AND REASONS.

A case having occurred in Bombay which showed that the Bombay law relating to the survey of steamships was not in harmony with the English law on the subject, it was thought desirable to amend the Bombay law. When, however, the question of legislation came to be considered, it appeared that there were no less than seven local Acts relating to steamships. Bombay, Bengal and Burma each had its special law regulating the survey of these ships, while there was no law on the subject in the Presidency of Madras. The multiplicity of laws relating to the survey of steamships, it was thought, could not but be inconvenient to shipowners whose ships traded between different Provinces. For instance, Act XVI. of 1871, which is in force in Burma, requires every steam-vessel plying on any of the rivers or waters of British Burma, except steam-vessels plying between a port in British Burma and a port not in British India, to be surveyed twice a year. In the same way, the Bombay Act, II. of 1864, as amended by Bombay Act IV. of 1873, requires every British steam-vessel, not holding a Board of Trade, British Indian or Colonial certificate, carrying passengers between any port of the Presidency of Bombay and any other port, to be surveyed twice a year, and the Bengal Act, V. of 1862, as amended by Act I. of 1868, also requires the survey twice in every year of all steam-vessels plying on any of the rivers or waters within the Province of Bengal, except steam-vessels which may ply between some port within that Province and some port not in British India. Under these laws, a steam-vessel which was surveyed in Bombay might, apparently, be required to

undergo a fresh survey on arrival in Calcutta, and another survey on arrival at a port in Burma. As legislation is necessary, it is, therefore, clearly expedient to have one uniform law relating to the survey of steam-vessels applicable to the whole of British India.

2. Besides providing for the survey of steam-vessels, the local Acts provide also for the examination of, and the grant of certificates to, engineers, and for holding investigations into explosions occurring on board steam-vessels. In these matters uniformity in the law is desirable.

3. After consulting the Local Governments concerned, the Government of India has decided to legislate so as to provide one law relating to the survey of sea-going steamships, the examination and grant of certificates to engineers of those ships, and the investigation into explosions occurring thereon. The present Bill has accordingly been prepared. It was, however, found at the same time necessary to legislate in like manner for steam-vessels plying on rivers and inland waters, inasmuch as the provisions of the local Acts related, to a certain extent, to those vessels as well as to sea-going vessels. With this view, a separate Bill—the Inland Steam-vessels Bill—has been prepared, so as to keep the law relating to merchant shipping—a law liable to be affected by legislation in England—entirely separate from the law regulating inland steam-vessels, which is a matter solely within the scope of Indian legislation.

4. The present Bill is divided into three chapters. The first chapter is purely formal. The second deals with the subject of the survey of steamships. It provides that a steamship shall not carry more than twelve passengers between places in British India, and that a British steamship shall not carry more than twelve passengers to or from any place in British India from or to any foreign port, unless she is furnished with a certificate of survey. It exempts steamships furnished with Board of Trade certificates or Colonial certificates, provides for the appointment of surveyors and ports of survey, prescribes the powers of surveyors and the conditions on which they are to grant certificates. It provides for the fees which are to be paid for certificates and the term for which they are to last, and it confers on the Local Government the power, under certain circumstances, of cancelling or suspending a certificate. It further enables the Local Government to make rules to regulate the time, place and manner in which surveys shall be made, and to assign and regulate the duties of each of the surveyors making it. To meet local requirements, a section (22) is also added, enabling the Local Government to exempt any specified class of steamships from all or any of the provisions of the chapter.

5. The principal changes introduced in the law by the provisions contained in the second chapter are as follows :—

Section 3 follows the English law (39 & 40 Vic., cap. 80, section 16), and only requires a survey in the case of steamships carrying more than twelve passengers.

The law as at present in force in Bengal and Burma is thus amended in an important point, and cargo steamers are exempted from survey.

Another change in the law is made by section 15 of the Bill, which

provides that a certificate of survey shall not remain in force for more than twelve months. At present, the law requires a survey twice a year, but it is thought that the power which the Local Government has under section 16 of the Bill of cancelling or suspending a certificate renders a survey every six months unnecessary.

Section 20 of the Bill enacts the provisions (regarding the grant of certificates of survey to foreign ships) of section 19, 39 & 40 Vic., cap. 80. It is considered that these provisions will be of use in India in the case of foreign ships which have been officially surveyed at a foreign port.

6. The third chapter of the Bill deals with the examination of, and grant of certificates to, engineers. It also contains a provision as to inquiries into cases of explosion, and miscellaneous sections regulating the jurisdiction and place of trial in cases of offences under the Act, and applies to steamships going to sea from a place in the Bombay Presidency, the provisions as to boats for sea-going ships of the Imperial Merchant Shipping Act, 1854.

7. Following the Imperial Merchant Shipping Act Amendment Act, 1862, the chapter provides that there are to be two grades of engineers—first class engineers and second class engineers. The Local Government is empowered to appoint examiners, and to make rules as to the conduct of the examinations, the qualifications to be required from the applicants and the fees to be paid by them. Certificates will be granted to those who, by the result of the examination show themselves to be possessed of the necessary qualifications.

8. This chapter also provides (section 26) for the grant of certificates of service as engineers. A first class certificate may be granted to a person who has served, before the passing of the Act, for a period of not less than one year as first engineer in any foreign-going steamship carrying engines of one hundred nominal horse-power or upwards, or who has attained, or shall attain, the rank of engineer in Her Majesty's service.

A second class certificate may be granted to a person who has, before the passing of the Act, served as second engineer in such a steamship or as sole engineer in a smaller one, or who obtains the rank of first class assistant engineer in Her Majesty's service. It is doubtful whether it is necessary or expedient to provide for the grant of certificates of service. The attention of the Local Governments concerned will be drawn to the point.

9. It is further provided (section 29), that foreign-going steamships shall not proceed to sea without engineers possessing certain specified certificates. Similar provisions are made for home-trade steamships, the steamships which are inland steam-vessels within the meaning of the Inland Steam-vessels Act being excepted.

10. The provisions of section 31, as to investigations into explosions, require no comment; and the last four sections of the Bill merely re-enact the existing law as to jurisdiction, the place of trial, the recovery of fees and fines, and the application to steamships leaving a port in the Bombay Presidency of certain provisions of the Imperial Merchant Shipping Act, 1854, concerning boats for sea-going ships.

The 5th March, 1883.

C. P. ILBERT.

BOMBAY CHAMBER OF COMMERCE, 1st June, 1883.

The SECRETARY to GOVERNMENT, Marine Department,
Bombay.

SIR,—I am directed to acknowledge the receipt of your letter No. 153 of 1883, dated 6th April last, forwarding a copy of a Bill to amend the law relating to the Survey of Steamships and the Examination and Grant of Certificates to Engineers of those ships, with Statement of Objects and Reasons, and requesting that Government may be favoured with the opinion of the Chamber of Commerce on the provisions of the Bill.

The Chamber, having referred the Bill to a Special Committee—consisting of James Thorburn, Esq., of the firm of Messrs. Sir Charles Forbes & Co., Chairman of the Chamber; F. D. Parker, Esq., Superintendent, Peninsular and Oriental Steam Navigation Company; R. S. Campbell, Esq., of the firm of Messrs. W. & A. Graham & Co.; W. Cooper, Esq., Superintending Engineer P. & O. Company's Dockyard; J. Dobbie, Esq., Superintending Engineer B. I. S. N. Company's Dockyard; J. A. Shepherd, Esq., of the firm of Shepherd & Co., Proprietors of the Bombay Steam Navigation Company; and J. L. Mackay, Esq., of the firm of Messrs. Mackinnon, Mackenzie & Co.,—has now the honour to submit its opinion upon it.

In the Statement of Objects and Reasons attached to this Bill, it is stated that the object of its introduction is to have one uniform law relating to the survey of steam-vessels, the examination of, and the grant of certificates to, engineers, and the holding investigations into explosions occurring on board steam-vessels, applicable to the whole of British India. The Chamber considers that, in these matters, uniformity in the law is desirable. The Chamber is, however, also of opinion that the rules, forms of certificates, and schedules, referred to in the Act, should, if not embodied in it, be made the same throughout the whole of British India, as the object of the proposed law will, to a great extent, be defeated if the rules, forms, and schedules are framed, or subject to alteration, by the various Local Governments, in which case vessels trading between ports in the different Presidencies will have to suffer the inconvenience of finding one set of rules, forms, and

schedules in force at one port, and a different set in force at another.

With these preliminary remarks, the Chamber proceeds to offer the following suggestions on such of the provisions of the Bill as seem to it to require emendation or alteration.

Section 3.—The Chamber suggests that a *British steamship* should be defined. It desires, also, to point out that there are native-owned steamships in India plying to British Indian Ports, and competing with British-owned ships, to which the provisions of this Bill might not be applicable, and to suggest that the section should be so worded as to embrace all such native-owned steamships.

Section 5, para. 2.—The Chamber suggests that, for the last four words of this para., viz., “some port of survey,” the following words be substituted:—“the port of survey which is the terminal port of her voyage.”

No vessel proceeding to a survey port as her destination should be subjected to be surveyed at an intermediate port. For instance, a vessel proceeding to sea and touching at intermediate ports, such as Madras or Kurrachee, might, unless exempted from the necessity of being surveyed at these ports, be detained three or four days, on her way to Bombay.

Sections 6, 7, and 8.—If the alteration suggested in section 5 be adopted, then these sections should be made to conform.

Section 11.—The Chamber suggests that for the words “not less than two” in the second line of this section, the words “one or more” be substituted. The section would then read thus:—

“Every survey under this Act shall be made by one or more surveyors, and when the survey is completed, the surveyor or surveyors making it shall forthwith, if he or they are satisfied that the steamship is sufficient, so far as it is his or their duty to survey her,” &c.

The Chamber considers that one duly qualified person, who is both an engineer and a shipwright, is sufficient for making surveys. This, the Chamber believes, is the arrangement at home and in Calcutta.

Section 12.—If the alteration suggested in section 11 is

adopted, then the words "surveyor or surveyors" should be substituted for the word "surveyors" in the third line of this section.

The Chamber also suggests that the whole of this section, after the words "in the form set forth in the first schedule hereto annexed," be omitted, as it appears to it to be very undesirable that the Local Government should have the power of framing rules for altering the forms of certificates.

Section 13.—If the alteration suggested in section 11 is adopted, then the words "surveyor or surveyors" should be substituted for the words "each of the surveyors" in the fourth line of this section, and also for the word "surveyors" in the fourth line of para. (b).

With regard to the power proposed to be given to the Local Government to alter the fees in the second schedule as they may from time to time by notification prescribe, the Chamber suggests that before any alteration is made in the schedule of fees payable in Bombay, the Chamber of Commerce should be consulted.

Section 19.—The Chamber suggests that for the words "Local Government" in this section, the words "Port Officer or other constituted authority" be substituted.

The Chamber submits this recommendation with the view of saving time and possible detention, when the members of the Local Government may happen to be absent from Bombay.

With regard to sub-section (3) of this section, the Chamber suggests that if, in the appeal, the surveyors decide in favour of the owners, the owners shall not be charged double fees.

Section 21.—Sub-Section (1).—The Chamber suggests that after the words "The Local Government may from time to time," the words "with the sanction of the Governor-General in Council" be inserted. This sub-section would then read thus :—

"The Local Government may from time to time, with the sanction of the Governor-General in Council, make rules to regulate the making of surveys under this Act."

The Chamber recommends that one set of rules be adopt-

ed for the whole of British India, and that the draft Rules be submitted to the Chamber of Commerce before confirmation.

Sub-Section (2).—The Chamber suggests that the words “among other matters” be omitted, as being very indefinite.

Sub-Section (2), para. (c).—The Chamber recommends that whatever schedule is adopted at the passing of the Act should be adhered to, and that para. (c) of sub-section (2), be struck out.

Section 23.—The Chamber suggests that this section should be altered to the following effect:—

Engineers’ certificates shall be of three grades, namely, “first-class engineers’ certificates,” “second-class engineers’ certificates,” and third-class certificates which might be termed “first-class drivers’ certificates,” which shall be for home-trade steamship making short voyages of not more than 60 hours, and of less than 300 tons registered tonnage.

It appears to the Chamber that, unless some such provision is made, persons in charge of the engines and machinery of vessels, which have been running along the coast for years with drivers’ certificates, would require first or second class engineers’ certificates, and it is not apparent how Government propose dealing with cases of this kind.

Section 24, para. (a).—If the suggestion made in the preceding section is adopted, this section should be made to conform, and the words “and first-class drivers’ certificates” added after the words “second-class engineers’ certificates.”

Section 25, Sub-Section (1).—The same remark applies to this section, and the words “or as a first-class driver,” inserted after the words “second-class engineer.”

Sub-Section (2).—The Chamber recommends that the certificate which has been in use by the Board of Trade be adopted and scheduled.

Section 26.—The Chamber recommends that the whole of this section be omitted.

The Chamber considers that the occasion has passed

which required engineers' certificates of service to be granted. There cannot now be any case of a person acting under a certificate of service : if he is acting under such a certificate, he is doing so illegally.

Section 29, Sub-Section (2).—The Chamber recommends that for the word “burden,” in the first line of this subsection, the words “registered tonnage” be substituted.

And if the suggestion made under section 23 is adopted, this section must be made to conform, and after the words “a second-class engineers' certificate” the words “a qualified driver's certificate” inserted.

The First Schedule.—The Chamber recommends that the schedule be assimilated in form to the certificate issued by the Board of Trade.—I have, &c.,

JAMES THORBURN, *Chairman.*
J. GORDON, *Secretary.*

APPENDIX BB.

THE INLAND STEAM VESSELS BILL, 1883.

No. 154 of 1883.

MARINE DEPARTMENT,
BOMBAY CASTLE, 6th April, 1883.

From the SECRETARY to GOVERNMENT to the SECRETARY BOMBAY
CHAMBER of COMMERCE.

SIR,—In forwarding herewith a copy of a Bill to amend the law relating to the Survey and the Examination and Grant of Certificate to Engineers of Inland Steam-vessels and to provide for certain other matters relating to those vessels and of a Statement of Objects and Reasons, I am directed to request you will have the goodness to favour Government, on or before the 20th May next, with the views of the Chamber on the Bill.—I have, &c.,

M. W. WILLOUGHBY, Colonel,
Secretary to Government.

STATEMENT OF OBJECTS AND REASONS.

It has been found expedient to legislate in order to bring the law regarding the survey of sea-going steam-vessels into conformity with the law of England and to have one law on that subject applicable to the whole of British India. The present law regulating the survey of these vessels is contained in various local Acts, which also contain provisions relating to inland steam-vessels; and it was thought that it would be better to repeal the whole of these Acts and separately enact the parts relating to sea-going and inland steam-vessels than to repeal only so much as was necessary and leave the Acts in a mutilated and probably obscure form. Moreover, it was thought desirable that there should be one law regarding inland steamers relating to the whole of India. The present law is insufficient. Madras is unprovided for, and there is no law to govern steamers plying in the province of Assam. The present Bill has accordingly been prepared. It is drawn so that it may be brought into force along with the Indian Steamships Bill, and it repeals the seven local Acts, relating to steamships, which are now in force.

2. The Bill is divided into eight chapters. It deals with the survey of inland steam-vessels, the examination and grant of certificates to masters and engineers of those vessels, the investigation into casualties occurring to them, the suspension and cancellation of masters' and engineers' certificates, and the protection of the vessels from fire,

and also prescribes the penalties for offences against the provisions of the Act, the jurisdiction of Magistrates and the place of trial.

3. In its main provisions the Bill follows the existing law so far as it goes. The points in which the law is changed and which require notice are as follows. The term for which the certificate of survey is to last is, by section 12 of the Bill, extended to one year, instead of six months as at present; but section 13 enables the Local Government, under certain circumstances, to cancel or suspend a certificate of survey. The power conferred by section 17 of the Bill of making rules to regulate a survey is somewhat larger than that given by the present law. The duties of each of the two surveyors are different, and the Bill therefore enables the Local Government to assign and regulate the duties of each. To meet local requirements, power is given in section 18 of the Bill to Local Governments to exempt any specified class of inland steam-vessels from all or any of the provisions relating to survey. In section 22 the Bill provides for the grant, without examination, of a certificate as engineer to a person who possesses a certificate granted under the Imperial Merchant Shipping Act or a certificate which is by the Merchant Shipping (Colonial) Act, 1869, equivalent thereto. It further provides in section 23 for the grant of certificates of service to engineers who have served for a certain time in certain steamships, or who have obtained the rank of first class assistant engineer in the service of Her Majesty. The provisions of Chapters IV. and V. of the Bill, regarding investigations into casualties and the cancelling and suspending of the certificates of masters and engineers, are taken, with slight modifications, from the Merchant Shipping Act, 1883, which was recently passed.

4. The whole of Chapter VI. is new. At present, there is no way of securing that due precautions are taken against fire and against the carriage of dangerous goods on passenger steamers. Chapter VI. follows to a certain extent the provisions of the Indian Railway Act, 1879. It confers on the Governor-General in Council power to declare what shall be deemed to be, for the purposes of the Act, dangerous goods, and prohibits persons from taking those goods on board except under certain conditions. Following section 23 of the Imperial Merchant Shipping Act, 1873, it empowers (section 46) the master or owner of a vessel to throw overboard dangerous goods which have been brought on board without notice or without being marked as required by the Act. It also (section 47) enables the Local Government to make rules for the protection of inland steam-vessels from danger by explosion or fire.

5. In Chapter VII. a section (56) has been inserted, providing a penalty for misconduct on the part of persons employed on board inland steam-vessels. This section is taken from the Indian Merchant Shipping Act, 1859, section 79, the penalty being modified so as to permit of an offence being punished by fine only.

6. Lastly, with regard to the rules which may be made under the Act, the Bill, section 62, secures that they shall be duly published for general information and criticism before they are sanctioned by the Governor-General in Council.

7. A statement is annexed showing how the provisions of the Acts which are repealed by the Bill are dealt with in this Bill and the Indian Steamships Bill.

5th March, 1883.

C. P. ILBERT.

BOMBAY CHAMBER OF COMMERCE, *1st June, 1883.*

The SECRETARY to GOVERNMENT, Marine Department,
Bombay.

SIR,—I am directed to acknowledge the receipt of your letter No. 154 of 1883, dated 6th April last, forwarding a copy of a Bill to amend the law relating to the Survey and the Examination and Grant of Certificates to Engineers of Inland Steam-vessels, and to provide for certain other matters relating to those vessels, with Statement of Objects and Reasons, and requesting that Government may be favoured with the opinion of the Chamber of Commerce on the provisions of the Bill.

The Chamber, having referred the Bill to a Special Committee—consisting of James Thorburn, Esq., of the firm of Messrs. Sir Charles Forbes & Co., Chairman of the Chamber; F. D. Parker, Esq., Superintendent Peninsular and Oriental Steam Navigation Company; R. S. Campbell, Esq., of the firm of Messrs. W. & A. Graham & Co.; W. Cooper, Esq., Superintending Engineer P. & O. Co.'s Dockyard; J. Dobbie, Esq., Superintending Engineer B. I. S. N. Co.'s Dockyard; J. A. Shepherd, Esq., of the firm of Shepherd & Co., Proprietors of the Bombay Steam Navigation Company; and J. L. Mackay, Esq., of the firm of Messrs. Mackinnon, Mackenzie & Co.,—has now the honour to submit its opinion upon it.

The object of this Bill appears, from the Statement of Objects and Reasons attached to it, to be to have one law relating to inland steam-vessels relating to the whole of British India. The repeal of the various local Acts which form the present law regulating the survey of these vessels, and their consolidation into one Act relating to the whole of India appears to the Chamber to be a very desirable measure; but, in order to secure this desired uniformity in the law, it considers that the rules, forms of certificates, and schedules, referred to in the Bill, should, if not embodied in it, be made the same throughout the whole of British India, as the object of the Bill will, to a great extent, be defeated if the rules, forms, and schedules are framed, or subject to alteration, by the various Local Governments.

With these preliminary remarks, the Chamber proceeds to offer the following suggestions on such of the pro-

visions of the Bill as seem to it to require emendation or alteration.

Section 4, Sub-Section 3.—The term “inland water” requires more specific definition. The Chamber is unable to gather from it whether or no the definition given is meant to include the harbour of Bombay, and the numerous tidal creeks on the western coast of India.

Section 8.—The Chamber suggests that for the words “not less than two,” in the second line of this section, the words “one or more” be substituted. The section would then read thus :—

“Every survey under this Act shall be made by one or more surveyors, and when the survey is completed, the surveyor or surveyors making it shall forthwith, if he or they are satisfied that the steam-vessel is sufficient, so far as it his or their “duty to survey her,” &c.

The Chamber considers that one duly qualified person, who is both an engineer and a shipwright, is sufficient for making surveys.

Section 9.—If the alteration suggested in the previous section is adopted, then the words “surveyor or surveyors” should be substituted for the words “each of the surveyors” in the second and third lines of this section.

The Chamber also suggests that the whole of this section after the words “in the form set forth in the second schedule hereto annexed,” be omitted. The Chamber considers that it would be more desirable to have the Act amended by a Bill introduced into the Legislative Council of the Governor-General than that the Local Government should have power to alter the schedule annexed to the Bill.

Section 10.—If the alteration suggested under section 8 is adopted, then the words “surveyor or surveyors” should be substituted for the words “each of the surveyors” in the fourth line of this section.

With regard to the power proposed to be given to the Local Government to alter the fees in the third schedule as they may from time to time by notification prescribe, the Chamber suggests that before any alteration is made in the

schedule of fees payable in Bombay, the Chamber of Commerce should be consulted.

Section 16, Sub-Section (1).—If the alteration suggested under section 8 is adopted, then the words “surveyor or” should be inserted between the second and third words of sub-section (1).

The Chamber also suggests that after the words “Local Government,” in this sub-section, the words “or such officer or officers as may be appointed under this Act” be inserted. This suggestion is made with the view of saving time and possible detention, when the members of the Local Government may be absent from the port of Bombay.

With regard to sub-section (3) of this section, the Chamber suggests that if, in the appeal, the surveyors decide in favour of the owners, the owners shall not be charged double fees.

Section 17, Sub-Section (1).—The Chamber suggests that after the words “The Local Government may,” the words “with the sanction of the Governor-General in Council,” be inserted. This sub-section would then read thus:—

“The Local Government may, with the sanction of the Governor-General in Council, make rules to regulate the making of surveys under this Act.”

The Chamber recommends that one set of rules be adopted for the whole of British India, and that the draft Rules be submitted to the Chamber of Commerce before confirmation.

Sub-Section (2).—The Chamber suggests that the words “among other matters” be omitted, as being very indefinite.

Sub-Section (2), para. (c).—The Chamber recommends that whatever schedule is adopted at the passing of the Act should be adhered to, and that para. (c), of sub-section (2), be struck out.

Section 19, Sub-Section (1), and Section 20, para. (a).—The working and application of these sections entirely depends on the rules, which should be made with the sanction of the Governor-General in Council, and the drafts sent to the Chamber of Commerce for approval.

Section 21.—The Chamber recommends that the following sub-section be added to this section:—

“Every person who, before the passing of this Act, has been a master of an inland steam-vessel

for one year shall be entitled to a certificate of service."

Many masters of ships do not require, like engineers, a knowledge of engines and machinery. They require a knowledge of rocks or shoals, in the special localities they navigate, which local experience only can give them.

Section 22.—The Chamber append to this Report a copy of the Report made by the Examiners for passing Marine Engineers and Engine Drivers for the Port of Bombay to the Port Officer of Bombay, as being likely to facilitate the preparation of the rules under the Act for the examination of persons desirous of obtaining certificates of competency as engineers of inland steam-vessels.

Section 23.—The Chamber recommends that the whole of this section be omitted.

The Chamber considers that the occasion has passed which required engineers' certificates of service to be granted. There cannot now be any case of a person acting under an engineer's certificate of service: if he is acting under such a certificate, he is doing so illegally.

Section 62, Sub-Section (1), (2), and (3).—The Chamber suggests that on every rule made by the Local Government under this Act, the opinion of the Chamber of Commerce should be requested, and the opinion of the Chamber, if not adopted by the Local Government, submitted for the consideration of the Governor-General in Council before the rule is sanctioned.—I have, &c.,

JAMES THORBURN, Chairman.

J. GORDON, Secretary.

Copy of the Report made by the Examiners for passing Marine Engineers and Engine Drivers for the Port of Bombay, to the Port Officer of Bombay, referred to under Section 22.

May, 1881.

To Captain H. MORLAND, Port Officer, Bombay.

DEAR SIR,—In accordance with the instructions contained in your letter No. — of May, 1881.

We, the Examiners for passing Marine Engineers and Engine Drivers for the Port of Bombay, formed ourselves into a Committee to take

into consideration the present Rules for passing Drivers of Steam Launches, Tugs, and Ferry Steam Boats, and find as follows :—

That the present rules for candidates for examination are too exclusive inasmuch as no man is eligible to appear before the Board who has not been a Serang or Tindal in sea-going Steamers.

Now we are of opinion, from our own experience, that there are numbers of intelligent firemen who have been for several years employed in sea-going Steamers, Launches, Tugs, Dredgers, &c., and as men in charge of Steam Winches and Donkey Boilers who are quite as eligible to appear before the Board to pass as third-class Drivers as the abovementioned Tindals and Serangs.

We also beg to draw your special attention to the fact that the present Driver's certificate makes him eligible to take charge of Engines and Boilers of any size of Steamer, viz., from the smallest Steam Launch to the largest Ferry Steamer carrying several hundred passengers and of unlimited power of Engines and number of Boilers, so long as the said steamers ply within the limits of the Bombay Harbour or Coasts.

We also find that no matter what damage a Driver has caused by gross neglect, recklessness, drunkenness or carelessness, we have no power to punish him or take away his certificate ; and although we have cases of this kind constantly occurring, we have no remedy, owing to the difficulty of getting others to fill their situations, as we find the number of applicants for examination from the Serang and Tindal class is not sufficient to meet the demand for good trustworthy certificated Drivers. And when it is taken into consideration that we have men of this description in charge of the largest steamers in the Port of Bombay carrying hundreds of passengers on each trip, we think it very desirable a change should take place to enable us to put in the most efficient men suitable for such a heavy charge of life and property.

From the abovementioned considerations, we herewith beg to submit to you the following Rules which, from our own experience of the type of men we have to deal with, we feel sure, will be much more effective in securing safety and efficiency :—

RULES.

1st.—That there shall be three classes of Drivers—first, second, and third classes.

2nd.—Testimonials of good character, sobriety, and experience will be required from all classes of candidates before they can present themselves for examination before the Board, and they must have been employed afloat amongst Marine Engines and Boilers for at least three years.

3rd.—The fee to be paid for examination must be Rs. 21 for a first class certificate, Rs. 15 for a second-class, and Rs. 10 for a third-class.

4th.—Should any candidate present himself for examination into any special class and fail to pass, he shall forfeit his fee.

5th.—The examinations will be all *vive voce* and for first-class drivers, the candidate must pass his examination in English ; the

second and third classes must speak sufficient English to be thoroughly versed in the technical names of all parts of the Engines and Boilers.

6th.—A third-class candidate must be practically tested in his knowledge of the use, working, and names of all parts of Engines and Boilers in one or more cylinder Launches Engines up to 11 H.P.

7th.—A second-class candidate's knowledge must be tested for Engines of one or more cylinders, condensing or non-condensing surface or jet condensers, simple or compound Engines up to 30 H.P.

8th.—A first-class candidate must have served five years as a fitter and turner (one or both) in a Workshop where Engines and Boilers are made and repaired, and served not less than two years in an Engine-room as an Assistant Engineer afloat in Steamers of not less than 30 H.P., or a Driver who has had charge of Marine Engines and Boilers of Steamer which have not less than 30 H.P. for the past three years. But in both cases they must prove themselves competent to the satisfaction of the examiners to be fit to have charge of Engines and Boilers in Steamers of from 30 H.P. and upwards, and show a thorough knowledge of simple and compound Engines, one or more cylinders, surface or jet condensers.

9th.—All the above certificates shall only hold good for Steam Launches, Tugs or Ferry Steamers within the limits of Bombay, such limits to be defined by the Port Officer.

10th.—Should any certificated Engine Driver cause damage to Machinery or Boilers through neglect of duty, carelessness or recklessness, or be discharged for drunkenness, and notice of the same be sent to the Board of Examiners, the said Board shall have it in their power to cancel the delinquent's certificate or suspend it for such a length of time as they may think an adequate punishment for the offence committed.

11th.—Certificates for sea-going Engineers to be in all respects the same as the Board of Trade, but the punishment for neglect, drunkenness, or causing any reckless damage to Machinery or Boilers to be the same as in Rule 10 for Drivers.

Trusting the above will meet your approval,—We have, &c.,

WM. COOPER, Assoc. M. I. C. E.,
Superintending Engineer, P. & O. Co.

JOHN DOBBIE,
Superintending Engineer, B. I. S. N. Co.

JAS. ANDERSON, Engineer, H. M. Dockyard,
At this date Engineer Surveyor, Bombay.

APPENDIX CC.

POSTAL ARRANGEMENTS BETWEEN BOMBAY AND KARACHI.

KARACHI CHAMBER OF COMMERCE, 20th March, 1883.

The CHAIRMAN CHAMBER OF COMMERCE, Bombay.

DEAR SIR,—I beg to hand you herewith copy of a letter addressed by this Chamber to H. E. the Viceroy and Governor-General of India, praying for the re-opening of the old Overland postal line between Bombay and Karachi *via* Ahmedabad and Hyderabad (Sind), and am desired by the members to solicit the favour of the valued co-operation of your Chamber in the furtherance of this Chamber's proposal.

You will observe that the Chamber has endeavoured to make the following points, in support of the proposed measure, viz. :—

- (a) The unsatisfactory nature of the present bi-weekly sea service between Bombay and Karachi.
- (b) The convenience and advantage of a regular daily post between these two points.
- (c) The practicability of establishing such a connection at present.
- (d) And the importance and utility of the measure projected ; not only in the interests of the State, but also of trade.

You will also notice that the Chamber has attempted to demonstrate that the reasons advanced for the abolition of the land line in 1877, and those subsequently assigned against its restoration, cannot now be maintained. And here I would particularly call attention to the fact that by the extension of the railway towards Deesa not only would the time occupied in transit between Bombay and Karachi be curtailed, but the cost at which the Overland line could now be maintained would be considerably less than before.

By summarising the many important changes that have transpired since the abolition, such as the opening of the Indus Valley and the Khandahar State Railways, the importance of our relations beyond the Bolan Pass, the increased vitality of the Karachi trade, and particularly by the extension of railway referred to above, the Chamber was desirous to represent the necessity for establishing more regular and satisfactory postal relations with your city than at present exist.

Further, the members are of opinion that as Government are apparently anxious to maintain as few subsidised sea postal lines as possi-

ble, the present is a most opportune moment at which to advocate the re-establishment of the land line.

Having regard, therefore, to these several arguments, and to the close commercial relations existing between your city and Karachi, the members are hopeful that you will accord to the Chamber's proposal the powerful influence and support of your Chamber.—
I am, &c.,

J. GRANT, Chairman.

KARACHI CHAMBER OF COMMERCE, 9th March, 1883.

To His Excellency the Most Honorable the MARQUIS of RIPON, K.G.,
P.C., G.M.S.I., G.M.I.E., Viceroy and Governor-General of India.

MY LORD MARQUIS,—I have the honour, on behalf of the members of this Chamber, as representing the mercantile interests of this Port, to address your Excellency with respect to the unsatisfactory postal arrangements as proposed for Sind by the Government of Bombay, in their Resolution No. 130, of 12th January 1883.

The Resolution goes on to say that :—

“On consideration of the circumstances, and of the Reports received, His Excellency the Governor-in-Council, I am to state, is of opinion that it is expedient for reasons postal and political to maintain the present subsidised line between Bombay, Karachi and the Persian Gulf, but thinks that a higher rate of speed should be maintained between Bombay and Karachi, and that unless this is satisfactorily provided for, the second weekly steamer between Bombay and Karachi should not be subsidised.”

I am to state that the members of the Chamber greatly regret that such unfavourable postal arrangements should have been proposed for this Province, and I have the honour to forward, herewith, to your Excellency, a copy of a Resolution passed at a Special General Meeting of the members, held on Friday the 23rd February last, expressive of the disfavour in which the proposed arrangements are held by them.

Your Excellency may probably be aware that the present postal line of communication between this Port and Bombay is by means of a bi-weekly service by the “British India Steam Navigation” Company's subsidised steamers, running to and from Karachi once a week, and the weekly mail steamer running to and from Bombay to the Persian Gulf Ports *via* Karachi.

But as anticipated by this Chamber when the Land line (to which I shall presently refer) was abolished, the working of these lines has been found to be not only most unsatisfactory, but, in the view of the Chamber, incommensurate with the requirements of the Province and the increasing trade of the Port.

Further, it is greatly to be feared that this inconvenience will be still more severely felt, should no higher speed be maintained by the British India Company's steamers, and, as suggested by the Bombay Government, the intermediate steamer be not subsidised.

It would seem, therefore, that the present is a fitting occasion for

the Chamber to represent to your Excellency the desirability of establishing between this Port and Bombay increased and better postal relations than at present exist.

With this view the Chamber, when invited by the Local Government, in December last, to name the postal lines to Karachi which, in view of the approaching termination of the existing Mail Contracts, it would be desirable to maintain, strongly advocated the re-opening of the daily overland service between Karachi and Bombay *via* Ahmedabad and Hyderabad (Sind).

In adopting this course the members were well assured that they were expressing the opinions not only of the mercantile community, but of all those to whom a daily postal service with the Presidency is of any importance whatever.

It has, moreover, been a source of some satisfaction to the Chamber to learn that the other public bodies in this city, as well as the Collector of the District, hold opinions precisely in accord with those which the Chamber entertains, with respect to the re-opening of the Land line.

In soliciting the re-establishment of this service, the Chamber's object was to remedy an evil which is a source of universal complaint, and which affects very prejudicially the trading interests of this Port. I refer to the arrangement under which the bi-weekly steamers arrive in Karachi, generally on the day on which the outward mails to Bombay are despatched; and at such hours too, as usually do not permit of correspondence received by the incoming steamers, being disposed of by the outward mail steamers; and the result is, that it is by no means unusual that intervals of ten days occur between the date of despatch of a letter to Bombay and the receipt of a reply thereto.

That such unsatisfactory postal relations between this Port and Bombay should have so long existed, has always been a matter for surprise and regret, and it is with the object of obtaining for this city increased facilities in this respect that I have been desired by the members of the Chamber to address your Excellency on this occasion, as they believe that some, at least, of the grounds on which the Land line was abolished, and has since been withheld, are no longer tenable.

In order that your Excellency may the more readily be able to review the reasons advanced for the abolition of the Land line, and those subsequently urged against its restoration, I venture respectfully to summarise the arguments for and against the proposed change.

In 1873 a proposal was made by the Director General of Post Offices in India for the abolition of the daily overland line *via* Amedabad and Hyderabad, and, in substitution thereof, for the establishment of a bi-weekly sea service between Bombay and Karachi.

The late Sir William Merewether, the then Commissioner of this Province, in protesting against the withdrawal of the daily land line wrote :—

“Taking Karachi, I am quite alive to the advantages to this Port of increased steam communication, and would gladly do anything

in my power to foster it. But when this advantage is to be obtained at the sacrifice of daily communication with, and our having only two mails per week from the Presidency, and the grand commercial centre, Bombay, I must most strongly protest against the change. As I said before, the extension and vitality of trade will, of themselves, further more frequent traffic by sea, in their own and in proper time. And it seems to me that the deprival of the Port of daily and punctual interchange of views and wants is much more likely to retard the natural advance of that extension and vitality than to promote it."

The views expressed by the Chamber at the time were as follow :—

" Having regard to the improved facilities which an additional steamer weekly will afford for the transport of merchandise to and from this Province, as well as for travelling, and more frequent and rapid communication with Bombay, the members agree that the alteration may be expected to prove beneficial. At the same time, however, they fear that the abolition of the daily mail will at some parts of the week retard business, and thereby cause loss and inconvenience to the Banks, and those firms, both European and Native, which work in connection with houses at Bombay, and in other parts of India ; to all of whom, frequent and regular correspondence is of the first importance."

This proposal to abolish the land line having been warmly opposed, the Government of Bombay was pleased to order its continuance *in addition to the bi-weekly sea service.*

In 1877 the Officiating Postmaster General of Bombay revived the question of abolishing the land line, alleging that, by its abolition, a considerable saving to Government would be effected, and that with a bi-weekly sea service the land service was ineffective, inasmuch as in the case of five days out of the seven, the mails could be delivered not only in Karachi, but in Sind generally, on the same day, or one or two days earlier by the sea service.

This proposal, after some delay, received the sanction of H. E. the Governor of Bombay. That sanction, however, was accorded in the face of the strongest remonstrance on the part of the Commissioner in Sind, the mercantile community, and the public generally, as will be noticed from the extracts which follow.

The Commissioner in Sind in his letter to the Government of Bombay, dated 16th April 1877, remarked :—

" That the proposal of the Postmaster General to abolish the postal land line from Ahmedabad to Hydrabad, and to open a bi-weekly communication by sea between Bombay and Karachi, is a retrograde policy, most injurious to the public interest, and fraught with the gravest inconvenience and danger to commercial and other interests, and expresses a hope that Government will concur with him in opposing it."

Again, the Acting Commissioner in Sind in his letter to the Government of Bombay, No. 152, dated 30th January 1878, is found to say :—

" Submitting, in reply to a reference, his Report on the subject of the land postal line between Bombay and Karachi, together with

correspondence from the leading Municipal and other Bodies in the Province, intimating their desire against the abolition of the land postal line, and that they would prefer the loss of the intermediate steamer to the loss of the line; and stating that if one of the two lines is to be abolished, the second steamer is that which could be best spared."

In the advantages claimed for the abolition of the land line, however, there are certain fallacies which require to be noticed.

First, it was claimed that the abolition of the land line would be a saving to the State. It appears, however, from subsequent correspondence, that the Postmaster General, Mr. James, contemplated the employment of the money thus saved in the extension of other postal lines, and that virtually the alternate line to Sind was sacrificed in order that (in the express words of the Postmaster General) countless villages in Kattywar might have increased postal facilities. The saving to the State, therefore, may be said to have been more illusory than real. Second, the Postmaster General in his letter to the Bombay Government, dated November 14th, 1877, said:—

"In the case of 5 out of 7 days in the week, the post can be delivered (not only in Karachi but in Sind generally) on the same day or one or two days earlier by sea than the land route; arrangements can easily be made in Sind to carry the Dak by railway immediately the steamer arrives."

I am to state with reference to the above remarks, that the promises held out by Mr. James have rarely, if ever, been realized, and that the bi-weekly sea-service thus forced upon the public in substitution of the land-line, has been attended, as anticipated by the Chamber, with unabated disappointment and inconvenience.

The Chamber is not aware whether the postal authorities ever entered into any arrangement with the Sind Railway Company for the despatch of the mails by train on arrival of the steamer, but it is within its knowledge that no such arrangement has ever been carried out. Nor, in the opinion of the Chamber, would such an arrangement be practicable, without serious outlay, as the steamers from Bombay arrive at different hours ranging throughout the day, and the probable inconvenience and expense of running trains in connection with the steamers would, the Chamber considers, materially lessen the intrinsic value of the advantages claimed for the sea-service by Mr. James.

Again, in reply to a reference by the Government of Bombay, Mr. James is found to say that:—"On the abolition of the land line between Ahmedabad and Hydrabad, he can *guarantee* regular postal service by sea to Karachi."

I am to remark in reference to Mr. James' guarantee, that, as compared with the land line the sea service has been attended with marked irregularity.

Further, quicker transit is claimed for the sea, as against the land service, but the fallacy in this respect may be said to be still more apparent. The advantages attending a quicker service no one will be disposed to gainsay; but these advantages are greatly diminished by the fact that they are only available twice in seven days, and the members of the Chamber are unanimously of opinion that they do

not outweigh the great convenience attending a *regular daily* postal service.

The cost of maintaining the old postal line *via* Ahmedabad to Hydrabad was Rs. 3,000 per mensem, and the time occupied in transit between Bombay and Karachi was about four days. But having regard to the extension of the railway to Palanpore (and very shortly to Deesa), the figures quoted above are capable of being sensibly reduced, as will be seen from the following table :—

	Hours.
Bombay to Palanpore, by Rail	19
Palanpore to Deesa, by Rail (18 miles)	1
Deesa to Hydrabad (in Sind) by Dak (about 320 miles, at 7 miles per hour)	45
Hydrabad to Karachi	7
Hours...	72

or about three days.

By the above railway extension, a considerable portion of the route formerly traversed by runners or horses would now be more expeditiously accomplished by train, and a material reduction would thereby be effected in the cost at which the overland service, if revived, could now be maintained.

Admitting, however, that the cost of maintaining the overland service between Bombay and Karachi would still be considerable, it must also be admitted that the advantages to be obtained by a *regular daily service* would be fully commensurate with the outlay.

The Government of Bombay, in their Resolution of January last, already referred to, say :—“ It is of immense importance not only to the few European residents at such places as Ratnagiri and Karwar, but also to all persons residing at or near the other ports scattered along the Coast, and to the community generally, to whom speedy postal communication is an object, and by whom the want of a daily post conveyed by quicker means than the present slow and circuitous land post is greatly felt, that a satisfactory daily sea postal service should be established between not only Bombay and the Southern ports of the Presidency, but between those ports themselves.”

Now Karachi has a population, according to the last census, of 74,000 souls. It occupies a position of great strategical importance, in relation to the Western frontier ; it has a trade of upwards of six millions sterling per annum,—a trade which is growing every year ; it is the acknowledged outlet of the great and rapidly developing wheat trade of the Punjab ; it is now the legitimate trade and postal centre not only for a large and important province, but for Quetta, Sibi, Rindli, Gulistan, and the other garrison districts on the Kandahar line. The Chamber would respectfully submit these as a few of the reasons which in their opinion entitle Karachi to increased postal facilities with the Presidency.

I would add that Karachi may fairly claim privileges equal, if not superior to those which it is proposed by the Government of Bombay, to accord to such places as :—

Ratnagiri, population.....	10,600
Karwar, “	13,000
Malwan, “	14,000
Vingorla, “	15,000

The inhabitants of these places belong chiefly to the agricultural

class, who have no interests beyond the limits of their own fields, and who, it may be safely presumed, will scarcely appreciate the privilege of daily postal communication with Bombay, which it is proposed to accord them.

And in the consideration of this subject it must also be borne in mind that when the abolition of the land line was effected, neither the Indus Valley State Railway nor the Kandehar State Railway was open for traffic, nor were our relations beyond the Bolan Pass what they are to-day; hence, very material arguments can now be advanced in favour of providing not only the whole of Sind, but a good portion of the Punjaub and Southern Afghanistan, with the means of daily communication with Bombay, the importance of which, not only in the interests of Government, but of trade, was dwelt on by Sir Richard Temple, Governor of Bombay, in his Resolution No. 2449 of 23rd May 1877, which runs as follows:—

“On a full consideration of all the points involved in this correspondence, His Excellency the Governor is of opinion that the change proposed by the Postmaster General would be inexpedient, and he would much regret its adoption. His Excellency was strongly impressed with his view during his brief visit to Sind.”

The Chamber desire to keep the question at issue entirely distinct from the larger question of a direct postal service between Karachi and Aden, for the conveyance of the English mails for Sind and Northern India. There are many reasons which might well incline the Government of India to a full consideration of this latter proposal. For instance, it has been demonstrated that the Government itself, while at Simla, would regularly receive its mails by this route two or three days earlier than at present. This, however, is a matter in which the Supreme Government, and the Government of the Punjab, are even more deeply interested than Sind, and the Chamber would now confine its attention strictly to provincial requirements.

In conclusion, I beg to inform your Excellency that the Chamber still maintains the opinion expressed in 1878, that it would be more to the general interests of the Port, if it were placed in daily communication with Bombay, even at the sacrifice of the second mail steamer. I would therefore express, on behalf of the Chamber, the hope that this representation may meet with the favourable consideration of your Excellency in Council, and that it may result in instructions being given by your Excellency for the restoration of the daily Overland service between Bombay and Karachi, on the expiry of the existing Mail Contracts. —I have, &c.,

J. GRANT, Chairman.

Copy of a Resolution passed at the Special General Meeting of the Chamber of Commerce, Karachi, held on Friday the 23rd February, 1883.

Proposed by Mr. A. McHinch, seconded by Mr. A. W. Gilbert, and carried unanimously.

“That this Chamber notice with concern the indifference with which the postal communication between Karachi and Bombay is regarded by the Government of Bombay, as shown in para. 9

of their Resolution No. 130, of 12th January 1883, as compared with the desire to facilitate intercourse between Bombay and less important points, exemplified in clause 12 of the same Resolution.

"This Chamber would point out that Karachi may reasonably expect increased rather than diminished postal conveniences, and that, in its opinion, the time has arrived when a daily service between it and Bombay should be re-established ; and as in the view of the Chamber, a daily sea service is at present impracticable, this Chamber strongly advocate the re-opening of the land line *via* Hyderabad, so that a regular daily service may be available."

KARACHI MUNICIPALITY.

Extract from the proceedings of the Meeting of the Managing Committee of the Karachi Municipality, held on the 24th of February, 1883.

Submitted for consideration the Bombay Government Resolution No. 130, dated 12th January 1883, regarding postal communication.

RESOLUTION.—The Municipality desire to record their great regret that in the Resolution of the Government of Bombay the convenience of this town in respect to its postal communications should have been considered as of little moment, notwithstanding that in the same Resolution it is recorded that such facilities are of "immense importance" in the case of a "few European residents," and other persons residing near the small southern Ports.

The Municipality consider that increased postal facilities are much needed by Karachi, and that an improved and more efficient service than the present bi-weekly steamer between Karachi and Bombay is called for. It would seem not unreasonable to provide a daily service to and from Bombay, a convenience which was enjoyed some years ago ; and unless arrangements can be made to increase both the speed and the departures of the present mail steamers (to not less than a tri-weekly service) the Municipality would prefer the re-opening of the land line, and would trust that Government will allow the matter early consideration.

Whilst on the subject of postal communication, the Municipality would desire to add that, in their opinion, the time has arrived when the convenience of this Province, the Punjab, and the entire N. W. Frontier, should be met by a direct postal service between Karachi and Aden, carried by subsidised steamers working in connection with the P. and O. S. N. Company. Speaking for this port alone, a saving of from four to five days would be effected in the carriage of its mails to and from England, and other places situated within the limits above referred to, would relatively benefit by such an arrangement. It is earnestly hoped that this question, which has been mooted for many years past, may now receive the attention which, it must be admitted, it deserves.

The Municipality desire that a copy of this Resolution may be forwarded both to the Government of India as well as to that of Bombay.

J. STRACHAN, M.I.C.E.,
Engineer and Secretary, Karachi Municipality.

BOMBAY CHAMBER OF COMMERCE, 25th April, 1883.

To the SECRETARY to GOVERNMENT, Revenue Department, Bombay.

SIR,—The Committee of the Chamber of Commerce have had under consideration the present postal arrangements between Bombay and Karachi; and they desire respectfully to submit their views on the subject to Government.

The present postal line of communication between the two ports is a bi-weekly service by the British India Steam Navigation Company's subsidised steamers, running to and from Karachi once a week, and the weekly mail-steamer running to and from Bombay to the Persian Gulf ports *via* Karachi. The Mail Contracts, the Committee understand, expire on the 30th April, 1884.

In a memorial addressed by the Karachi Chamber of Commerce, on the 9th of March last, to His Excellency the Viceroy and Governor-General, it is stated that the Government of Bombay, in its Resolution No. 130 of 12th January 1883, "is of opinion that it is expedient, for reasons postal and political, to maintain the present subsidised line between Bombay, Karachi, and the Persian Gulf, but thinks that a higher rate of speed should be maintained between Bombay and Karachi, and that unless this is satisfactorily provided for, the second weekly steamer, between Bombay and Karachi, should not be subsidised." The Karachi Chamber consider these postal arrangements proposed for Sind by the Government of Bombay to be most unfavourable, and they submit that it would be more for the general interest of that port if it were placed in daily communication with Bombay, even at the sacrifice of the second mail steamer; and that the daily overland service between Bombay and Karachi should, on the expiry of the existing mail contracts, be restored. In this opinion the Committee of this Chamber concur, with the exception of the suggestion to withdraw the subsidy to the bi-weekly steamer, which they would like to see still continued. The daily postal overland service between Bombay and Karachi was abolished in 1878, the principal reasons being the delay, irregularity, and cost of the land line as against the sea service. With the extension, however, of the Railway to Palanpur (and very shortly to Deesa), a considerable portion of the route formerly traversed by runners or horses would now be accomplished by train, and

the cost at which the overland service could now be maintained would be much less than formerly.

The Committee, however, consider that the question of cost, whatever it might now be, is of little importance when compared with the great advantages which would accrue to the two ports, but particularly to Karachi, from the re-establishment of a daily overland service, and to which the great and growing importance of that port entitles it. The Karachi Chamber point out that when the overland postal service was abolished, neither the Indus Valley State Railway nor the Kandahar State Railway was opened for traffic, nor were our relations beyond the Bolan Pass what they are to-day. Karachi, however, has now a population of 74,000 souls, and a trade, which is increasing every year, of upwards of six million sterling per annum. It is the outlet of the wheat trade of the Punjab. It is now the trade and postal centre, not only for a large and important province, but for Quetta, Sibi, Rindly, Gulistan, and the other garrison districts on the Kandahar line.

The opinion of the Karachi Chamber, as representing the mercantile community, that the land postal line should be re-established, is supported by other public bodies in that city, as well as by the Collector of the district, and by all those to whom regular postal communication with the Presidency is an object; and the Committee venture to express their hope that the great and increasing importance to which the port of Karachi has now attained may induce His Excellency the Governor in Council to reconsider the subject, and obtain for it the boon of a regular daily service, by the restoration of the overland line. —I have, &c.,

J. GORDON, Secretary.

No. 3326 OF 1883.

FINANCIAL DEPARTMENT,
BOMBAY-CASTLE, 13th September, 1883.

To the SECRETARY, Chamber of Commerce, Bombay.

SIR,—With reference to your letter, dated 25th April last, I am directed to forward, for the information of the Chamber of Commerce, the accompanying copies of a letter from the Government of India, No. 2707, dated 17th August 1883, communicating the views of that

Government on the subject of improved postal communications between Bombay and Karachi and the establishment of a direct postal service between Karachi and Aden.—I have, &c.,

J. MONTEATH,
Acting Under-Secretary to Government.

No. 2707.

GOVERNMENT OF INDIA.
DEPARTMENT OF FINANCE AND COMMERCE.
SEPARATE REVENUE, &c.
Post Office.
Contracts for Steam Service.

SIMLA, 17th August, 1883.

To the SECRETARY to the GOVERNMENT of BOMBAY.

SIR,—I am directed to acknowledge the receipt of your letters, Nos. 1757 and 2545, dated 9th May and 13th July 1883, respectively, forwarding copy of a letter from the Bombay Chamber of Commerce, and of a memorial from the Managing Committee of the Karachi City Municipality, on the subject of improved postal communication between Bombay and Karachi, and the establishment of a direct postal service between Karachi and Aden.

2. It is proposed, with a view to provide a daily postal service between Karachi and Bombay, to re-establish the land line *via* Singam in addition to the semi-weekly service now working between these ports.

3. It is also proposed by the Karachi City Municipality that a direct postal service between Karachi and Aden should be established.

4. In reply, I am directed to state that statistics expressly taken for the purpose of ascertaining whether the expenditure to be incurred would be covered by the receipts from the land line *via* Singam have shown that the correspondence affected does not warrant the large expenditure involved in the re-establishment of the line. The Government of India therefore concurs with the Government of Bombay in regarding the restoration of the Singam line as inexpedient.

5. As regards the dissatisfaction expressed by the Government of Bombay with the existing sea service, I am desired to point out that, while the present contract provides a speed of $7\frac{1}{2}$ miles an hour, the tenders for the new sea service contemplate a speed of 10 knots an hour for the direct service between Karachi and Bombay, and 9 knots an hour for the second weekly steamer that has the option of calling at the chief intermediate ports.

6. As regards the proposal to establish a direct postal service between Karachi and Aden, I am to say that it has been ascertained

that the cost of maintaining any such line would be so great as to render it impossible for the Government of India to entertain the idea.—I have, &c.,

R. LOGAN,
Under-Secretary to the Government of India.

Copy of the above forwarded to the Foreign Department, with reference to its endorsement, No. 981 E., dated 15th May 1883, for communication to the Agent, Governor-General, Biluchistan, and to the Director General of the Post Office of India for information.—By order,

R. LOGAN,
Under-Secretary to the Government of India.

BOMBAY CHAMBER OF COMMERCE, 28th September, 1883.

The CHAIRMAN CHAMBER of COMMERCE, Karachi.

DEAR SIR,—With reference to my letter of the 27th April last, I am now directed by the Committee of this Chamber to forward to you a copy of the Resolution of the Government of India on the subject of improved postal communication between Bombay and Karachi, and the establishment of a direct postal service between Karachi and Aden.—I remain, &c.,

J. GORDON, Secretary.

APPENDIX D D.

PROPOSED LINE OF RAILWAY FROM GODRA TO RUTLAM.

No. 126 OF 1883.

BOMBAY, BARODA AND CENTRAL INDIA RAILWAY,
AGENT'S OFFICE, BOMBAY, *6th January, 1883.*

To Colonel H. F. HANCOCK, R.E., Consulting Engineer for Railways,
and Joint-Secretary to Government, Bombay Branch, P. W. D.,
Bombay.

SIR,—I am desired by my Board again to address Government on the question of a survey for the line necessary to complete the connection by railway between Godra and Rutlam.

2. The traffic already carried over the railway from Godra is considerable. In spite of the want of railway communication and the consequent suspension of goods traffic across the Mhye river during nearly five out of the ten months that have elapsed since the extension from Pali to Godra, 17 miles in length, was opened, the goods traffic on the extension has already exceeded the expectations formed of its extent and value as a source of profitable revenue to the Company, while the produce exported by railway from Godra is considerably heavier than was brought to the line at Pali when the railway ended there.

3. I append a statement, based on approximate but fairly accurate figures as regards the last few weeks of 1882, that shows the revenue and the character of the traffic derived by this Company from the Pali-Godra extension during the period between 23rd February, when the extension was first opened, and 31st December last. An examination of the figures of this statement shows that a large proportion of the traffic previously carried from Pali really came from the Godra districts and beyond, while the extension of railway communication to Godra itself has so stimulated production in those districts that the export of some of the most important articles of traffic by railway *via* Godra has already nearly doubled. The quantity of firewood brought from Pali in 1881 was 3,575 tons, which fell to 902 tons in 1882, while from Godra no less than 12,510 tons was carried by the railway. The grain traffic from Pali in 1881 amounted to 7,141 tons, but in 1882 only 1,373 tons were brought from that point, while 10,127 tons came from Godra. Of mowra also Pali forwarded 7,725 tons in 1881, but 1,510 tons only in 1882, while Godra supplied 7,558 tons. In seeds traffic we received 3,261 tons in 1881 from Pali and 514 tons only in 1882, while from Godra we carried 2,670 tons. The timber traffic showed also great advance, for, while we brought from Pali 7,603 tons in 1881 and only 1,129 tons in 1882, Godra furnished in the latter year 10,359 tons. These are the main products of the district, and comparison of the results shows that, while we carried from Pali alone in 1881, before the Godra extension was opened, 29,305 tons of produce of these descriptions, in 1882 we carried from Godra and Pali together 48,652 tons of the same products, of which

43,224 tons came from Godra, thus indicating that the extension of the line to Godra had brought railway communication into a very productive district, the trade of which only required facilities of transport for its expansion.

4. Without reckoning the small receipts from Veganpur and Timba Stations, this statement indicates, notwithstanding the closure of the branch for goods traffic during one-half of the time, an additional earning to this Company of Rs. 185,000 during that period over and above what formerly reached the line when it stopped at Pali ; and bearing in mind that the construction cost of the Pali-Godra extension, including completion of the bridge over the Mhye river, has not exceeded, after adding to actual outlay a fair allowance for Rolling-stock, Rs. 10 lakhs, or say Rs. 60,000 per mile, the value of the extension as an investment is obvious. If only 45 per cent. of this additional revenue is profit, the return to the Company during the first ten months after construction of the extension has, in spite of all drawbacks, exceeded 8 per cent. on the additional capital thus expended.

5. A further extension of the present railway from Godra to Dohad, a district through which, it is believed, a line of the same character could be constructed at moderate cost, would, there is good reason to believe, be also a profitable investment of capital. The statistics furnished by Mr. Little, Executive Engineer, Kaira Districts, in his report, dated 24th May last, and submitted to Government, indicate that a considerable traffic passes between Dohad and Godra, and, looking at those statistics in the light of our actual and later experience at Godra, there can be little doubt that the further extension of the railway towards Dohad would be followed by largely increased production and activity of trade.

6. To give the fertile districts of Malwa on the one hand and Gujarat and Kattiawar on the other, however, the full benefit of convenient outlets for their produce and trade, the completion of railway communication between Dohad and Rutlam is also necessary. Salt and tobacco, that now chiefly take the Bombay or the Sabarmati route to Central India, would pass over the new line, while much of the opium grown in the Malwa districts would take the shorter route to Bombay that the new connecting line would furnish as compared with the route via Khundwa ; the developement of the cultivable portions of the country traversed by the new line would also be promoted, and its productiveness largely increased.

7. A fair judgment of the return to be looked for on the cost of such an extension cannot be formed, indeed, until a reliable estimate of that cost has been obtained, but of the value of such a connection to the States of Malwa, Gujarat and Kattiawar there can be little doubt, while as a necessary link in any future extension of railway communication through Central India towards the North-West Provinces that shall benefit Gujarat and Kattiawar also it is of essential importance.

8. I trust, therefore, that His Excellency the Governor in Council will see fit to move the Government of India to give further consideration to this question, and now to authorize a reliable survey for a board gauge line to be made between Godra and Rutlam. This Company will gladly carry it out on account of Government, if Government so desire ; but, whatever the executive agency employed for

the purpose may be, the interests involved in the obtaining of a good survey render it, in the opinion of my Board, desirable that reliable data should be thus obtained, with as little delay as may be necessary, as a basis on which to form a judgment for future action.—I have, &c.,

T. W. WOOD, Agent.

B. B. & C. I. RAILWAY.

APPROXIMATE STATEMENT OF TRAFFIC WITH GODRA IN 1882.

(23rd February to 31st December 1882.)

GOODS TRAFFIC SUSPENDED FROM 7TH JUNE TO 3RD NOV. 1882.

FROM GODRA.			TO GODRA.		
Description of Goods.	Tons.	Rs.	Description of Goods.	Tons.	Rs.
Firewood	12,510	61,960	Salt	4,443	33,241
Grain	10,127	96,442	Tobacco	123	709
Mowra	7,558	71,658	Other Goods and Pro-	2,460	29,474
Seeds	2,670	26,186	duce		
Timber	10,359	70,528			
Other Goods and Pro-					
duce	4,180	32,428			
Total	47,404	3,59,202		7,026	63,424

Total—Outward Goods, Tons 47,404 Rs. 3,59,202
 Inward Goods, Tons 7,026 „ 63,424
 Passenger, &c., Receipts „ 34,297
 Rs. 4,56,923

Deduct—Receipts at Pali in 1881—

See Appen- } Outward Goods Tons 38,409... Rs. 2,59,983
 dix A { Inward Goods, Tons 10,984 .. „ 84,107
 Passenger, &c., Receipts .. „ 35,110

Rs. 3,79,200

Less—Receipts at Pali in 1882—

See Appen- } Outward Goods, Tons 13,734... Rs. 62,713
 dix B { Inward Goods, Tons 2,800 .. „ 25,757
 Passenger, &c., Receipts .. „ 18,778

Rs. 1,07,248

Rs. 2,71,952

Net Increase arising from Godra Traffic in 1882, Goods traffic having been carried during about five months of the year only .. Rs. 1,84,971

APPENDIX A.

FROM PALI IN 1881.			TO PALI IN 1881.		
Description.	Tons.	Rs.	Description.	Tons.	Rs.
Firewood	3,575	14,134	Salt	8,228	50,666
Grain	7,141	67,121	Tobacco	148	724
Mowra	7,725	66,344	Other Goods and Pro-	2,608	32,717
Seeds	3,261	30,611	duce		
Timber	7,603	42,250			
Other Goods and Pro-					
duce	4,924	31,574			
Stone	4,180	7,919			
Total....	38,409	2,59,983		10,984	84,107

APPENDIX B.

FROM PALI IN 1882.			TO PALI IN 1882.		
Description.	Tons.	Rs.	Description.	Tons.	Rs.
Firewood	902	3,901	Salt	1,645	11,192
Grain	1,373	10,919	Tobacco	40	194
Mowra	1,510	13,047	Other Goods and Pro-		
Seeds	514	4,438	duce	1,115	14,371
Timber	1,129	6,644			
Other Goods and Pro-					
duce	2,283	14,420			
Stone	6,023	9,314			
Total....	13,734	62,713		2,800	25,757

No. 104 OF 1883.

PUBLIC WORKS DEPARTMENT (RAILWAY),

BOMBAY CASTLE, 19th January, 1883.

Read Government Resolution No. 1082, dated 23rd May 1882.

From the Consulting Engineer for Railways, No. 170, dated 13th January 1883.

Submits, with remarks, letter from the Agent, Bombay, Baroda and Central India Railway Company, No. 126, dated 6th January 1883, requesting that the Government of India may be moved to give further consideration to the question of a survey for the line necessary to complete the connection by railway between Godra and Rutlam. Suggests that it may be forwarded to the Government of India, with reference to previous correspondence, and the hope expressed that the Government of India may now see their way to having the survey carried out either by the Bombay, Baroda and Central India Railway Company, or their own officers.

RESOLUTION.—The Government of India should be addressed accordingly.

R. T. FRERE, Major, R.E.,
Under-Secretary to Government.

BOMBAY CHAMBER OF COMMERCE, 19th February, 1883.

To Colonel H. F. HANCOCK, R.E., Consulting Engineer for Railways, and Joint-Secretary to Government, Bombay Branch, P.W.D.

SIR,—I am directed by the Committee of the Chamber of Commerce respectfully again to address His Excellency

the Governor in Council on the question of a survey for a line of railway between Godra and Rutlam.

The Chamber in September 1881 submitted, for the consideration of His Excellency, the great benefit which would accrue to the trade of Western India from the construction of a light broad gauge line from Godra to Rutlam and from Rutlam to Gwalior. From the correspondence which subsequently passed, the Chamber learned that His Excellency was pleased to recommend the survey between Godra and Rutlam, but that he considered the proposal, as regarded the extension from Rutlam to Gwalior to be not one to be accepted. In this view to Government of India concurred, adding, however, that with regard to the junction between Godra and Rutlam a further communication would be made to His Excellency after the opinion of the Governor-General's Agent, Central India, had been received. But on the 23rd May last, His Excellency informed the Chamber that the Government of India had intimated that after a careful review of the facts and circumstances they had finally decided not to sanction the prosecution of the survey for a line of railway between Godra and Rutlam.

The Committee, however, are now gratified to learn that, at the request of the B. B. & C. I. Railway Company, His Excellency has been pleased again to urge upon the Government of India the desirability of this survey being undertaken.

The connection of Godra with Rutlam by a line of railway, while developing the districts through which the line will pass, will open up direct communication between Malwa, Gujarat, and Kathiawar, and the traffic passing over it will be considerable.

The time which has elapsed since the Chamber submitted in September 1881, for His Excellency's consideration, the desirability of a survey for this line, has enabled the B. B. and C. I. Railway Company to ascertain the nature of the traffic on their extension from Pali to Godra, and the direction of the districts from which the traffic comes; and detailed information on these points was supplied by that Company to Government in their communication of the 6th of January last. The statement then furnished shows that a large proportion of the traffic came from the districts eastward of Godra, and that notwithstanding the difficulties

of transit over tracts through which good road accommodation is very limited before the railway station is reached, there has already been a large increase of traffic from Godra in the export of some of the most important articles. These results have occurred in a country which is still unopened, and shut out from intercourse with adjacent provinces, and they seem to the Chamber to prove that the extension of the Railway from Godra to Rutlam would greatly stimulate production in the districts, and enlarge the volume of their trade; and that the net revenue which would be derived from the extension would yield a fair return on the capital expended.

While the development of the districts will probably be followed by a large local traffic, the receipts from the through traffic will also, there is reason to believe, be considerable, to say nothing of the great benefit which will accrue to the State, as well as to the people, from the opening up of the districts themselves, and of direct communication between Central India, Gujarat, and Kathiawar.

The Committee, therefore, will be glad if His Excellency will do the Chamber the favour to forward a copy of this letter to the Government of India, and they desire to express their earnest hope that His Excellency the Governor-General in Council may be pleased to reconsider his decision and sanction the survey for the line necessary to complete the connection by railway between Godra and Rutlam.—I have, &c.,

JAMES THORBURN, Chairman.
J. GORDON, Secretary.

No. 315 of 1883.

PUBLIC WORKS DEPARTMENT (RAILWAY),
BOMBAY CASTLE, 24th February, 1883.

To the SECRETARY to the CHAMBER OF COMMERCE, Bombay.

SIR,—I am directed to acknowledge the receipt of your letter dated 19th instant, urging for consideration the question of a survey for a line of railway between Godra and Rutlam and to forward a copy of the orders passed thereon by the Government of Bombay.—I have, &c.,

R. T. FRERÉ, Major, R.E.,
Under-Secretary to Government.

No. 313 OF 1883.

PUBLIC WORKS DEPARTMENT (RAILWAY),
BOMBAY CASTLE, 23rd February, 1883.

Read again Government Resolution No. 300, dated 22nd February 1883.

Memorial from Shett Premabhoy Heemabhoy, and other people of Gujarat and Kathiawar, dated 25th January 1883, praying for an extension of the Railway from Godra to Rutlam.

From the Secretary to the Chamber of Commerce, Bombay, dated 19th February 1883.

Urges for consideration the question of a survey for a line of Railway between Godra and Rutlam.

RESOLUTION.—The memorial and the letter from the Secretary to the Chamber of Commerce, dated 19th instant, should be submitted to the Government of India, with reference to former proceedings ending with their letter No. 156 R.C., of the same date, sanctioning the proposed survey for a line of Railway from Godra to Rutlam.

2. The memorialists and the Chamber to be informed that the Government of Bombay have for some time past advocated the construction of a line to connect Godra with Rutlam, and that their memorial and letter will be forwarded as above. They should further be informed that the Government of India have now sanctioned the necessary surveys, which are to be carried out at State expense through the agency of the Bombay, Baroda and Central India Railway Company.

R. T. FRERE, Major, R.E.,
Under-Secretary to Government.

No. 412 OF 1883.

PUBLIC WORKS DEPARTMENT (RAILWAY),
BOMBAY CASTLE, 15th March, 1883.

To the SECRETARY to the CHAMBER of COMMERCE, Bombay.

SIR,—In continuation of my letter No. 315, dated 23rd February 1883, I am directed to forward copy of a letter, No. 235 R.C., dated 8th instant, from the Government of India relating to the extension of the Railway from Godra to Rutlam.—I have, &c.

R. T. FRERE, Major, R.E.,
Under-Secretary to Government.

No. 235 R.C.

GOVERNMENT OF INDIA,
PUBLIC WORKS DEPARTMENT (RAILWAY CONSTRUCTION),
FORT WILLIAM, 8th March, 1883.

To the SECRETARY to the GOVERNMENT of BOMBAY, Public Works Department.

SIR,—I am directed to acknowledge the receipt of your letter

No. 314 of the 23rd February 1883, submitting copy of a memorial from the people of Gujarat and Kathiawar praying for an extension of the Railway from Godra to Rutlam, and also a letter from the Bombay Chamber of Commerce on the same subject.

2. In reply, I am to state the memorial and letter will be taken into consideration in connection with the project for the line in question, the survey for which has been ordered recently.—I have, &c.,

F. S. STANTON, Col., R.E.,
Deputy Secretary.

APPENDIX EE.

EXTENSION OF THE BHOPAL STATE RAILWAY THROUGH LALITPUR AND JHANSI TO GWALIOR WITH A BRANCH FROM JHANSI TO CAWNPORE.

Further correspondence regarding the proposed extension of the railway from Bhopal to Gwalior and Cawnpore in connection with the G. I. P. Railway system :—

No. 119 of 1881.

GREAT INDIAN PENINSULA RAILWAY COMPANY,
3, NEW BROAD STREET, E. C., 10th October, 1881.

The UNDER-SECRETARY of STATE for INDIA, India Office, S. W.

SIR,—The attention of the Board has frequently been directed to the advantage which would result from a more direct connection of the Great Indian Peninsula Railway Company's system with Cawnpore and Agra ; and the approaching completion of the railway from Agra to Gwalior, and the construction of a line from Itarsee, on the Great Indian Peninsula line, to Bhopal, renders it desirable that through communication should be established between Bhopal and Gwalior without any avoidable delay.

A line of railway from Itarsee to Agra and Cawnpore *via* Bhopal would shorten the distance by the Great Indian Peninsula route from Bombay to Agra by about 273 miles, and from Bombay to Cawnpore about 114 miles.

Independent of the through traffic, it would open up a rich country now unprovided with railways, and be distinctly a protective work in the event of future famines.

The advantages of this shorter communication, not only to the Railway Company, but to the State and to the districts traversed, are so obvious that they need not further be dwelt upon, and as the lines from Agra to Gwalior, and from Bhopal to Itarsee are on the broad gauge, it is equally clear that these lines, with the connecting link between Bhopal and Gwalior, could be most advantageously worked as part of the Great Indian Peninsula Railway system.

The Board are informed that the works on the proposed line are not likely to be of a heavy or difficult character (with the exception of a bridge over the river Jumna at Calpee), and that the cost would probably be less than £10,000 a mile for a distance of 385 miles.

The Board would be glad to be informed whether there is any

probability of early sanction being given for taking this line in hand, and in that case, they would be willing to submit proposals for constructing it as a part of their system.—I am, &c.,

THOMAS R. WATT.

P. W. 1435.

INDIA OFFICE, S. W., 27th October, 1881.

THOMAS R. WATT, Esq., Great Indian Peninsula Railway.

SIR,—I have received and laid before the Secretary of State for India in Council your letter No. 119, dated the 10th October, in which attention is drawn by the Great Indian Peninsula Railway Board to the approaching completion of the railway from Agra to Gwalior, and to the construction of a line from Itarsee on the Great Indian Peninsula Railway to Bhopal, and requesting to be informed whether there is any probability of early sanction being given for taking in hand a line which would complete the communication between Bhopal and Gwalior; also stating that, in that case, the Directors would be willing to submit proposals for constructing it as a part of their system.

In reply, I am instructed to inform you that the question of connecting Gwalior and Bhopal by means of a railway has recently received the consideration of the Secretary of State in Council, and that it has been decided that it would be premature to take any measures in view to forming the communication in question.

With reference to the offer of the Board to submit proposals for extending their system in the direction indicated, I am desired to say that the Secretary of State would not be disposed to enlarge the operations of the Company under any arrangement which would involve any extension of the guarantee of interest, or the grant of pecuniary assistance from the State in any shape.—I am, &c.,

LOUIS MALLET.

No. 143 of 1881.

GREAT INDIAN PENINSULA RAILWAY COMPANY,
3, NEW BROAD STREET, E. C.,
LONDON, 21st November, 1881.

THE UNDER-SECRETARY OF STATE for INDIA, India Office, S. W.

SIR,—I am directed to acknowledge the receipt of your letter, dated the 27th ultimo, intimating that the Secretary of State for India in Council considers the proposals recently submitted for the extension of this Company's system in the direction of Gwalior and Cawnpore premature, and is not prepared to sanction any arrangement which would involve the guarantee of interest, or the grant of pecuniary assistance from the State in any shape.

2. The Board readily admit that in the face of the many projects

now under the consideration of Government, it would be unreasonable to expect that exceptional favour should be shown to the particular one in which they happen to be interested. Being, however, strongly of opinion that the extensions in question are essential to furthering the prosperity of the Main Line, the Board desire me to again address you on the subject, and to respectfully express their hope that his Lordship will, for the reasons which I am to give, and which, were perhaps not advanced in my first communication with adequate cogency, be induced to re-consider the decision referred to.

3. The merits of this project and the direct financial benefit it will confer on the State by augmenting the traffic of the Main Line will be subsequently referred to. But the first and chief point to which I am to invite special attention is the unprecedentedly small cost at which this valuable and extensive addition to the railway system of India can be effected by the combined action of the Government and the Company.

4. The financial basis on which the Board would be prepared to recommend their shareholders to undertake these extensions is this. The total distance, comprising a line from Bhopal to Jhansi, and carried on from thence to Gwalior in one direction, and to Cawnpore in another, is 385 miles. It is believed that these lines can be constructed for a sum not exceeding £9,000 per mile, or at a total capital outlay of about three and a half millions sterling; and there can be little doubt that the requisite money can be obtained on Debentures of the Company, bearing interest at four per cent. Assuming this expenditure to be spread over a period of four years, at the rate shown below, the cost of interest during the period of construction would aggregate £320,000 :—

	Millions.	Interest.
1st year.....	$\frac{1}{2}$ —	20,000
2nd year	1 $1\frac{1}{2}$	60,000
3rd year	1 $2\frac{1}{2}$	100,000
4th year.....	1 $3\frac{1}{2}$	140,000
	3 $\frac{1}{2}$	320,000

5. Now there can be no doubt that the Company's surplus receipts would be ample to meet their moiety of the interest charges accruing during the alternate half-years; and in this way the actual outlay the Government would be called upon to provide would be £240,000 spread over a period of four years, the balance being met by the Company out of their share of surplus profits.

1st year	£15,000
2nd year	45,000
3rd year	75,000
4th year	105,000
	£240,000

6. Having regard to the country which will be opened out, as well as the direct communications to important points which would be afforded by the proposed lines, the Board cannot doubt that the traffic would after the first year of opening pay the interest on the comparatively small capital absorbed in their construction, and even leave a surplus profit. They therefore desire to bring prominently to notice that the interest charge above indicated can only be regarded as a temporary advance, which would certainly and quickly be recouped

with interest both to the Government and their partners, the Company, by the earnings of the new lines, and by the increased traffic that would be brought on to the Main Line.

7. The Board confidently affirm that it is not possible for any railway project to be undertaken on more favourable financial terms to the State than those I have endeavoured to indicate.

8. I am next to enumerate very briefly some of the advantages to be derived from these extensions :—

Firstly.—They would afford through communication without break of gauge between Bombay and the important Districts of which Agra and Cawnpore are the centres.

The following is a comparison of the distances by the several routes :—

1st, Bombay to Agra—

By the proposed route	850 miles.
By Jubbulpore and Allahabad	1,122 „
By the Rajpootana Line	841 „

2nd, Bombay to Cawnpore—

By the proposed route	858 „
By Jubbulpore and Allahabad	964 „
By the Rajpootana Line.....	1,024 „

Secondly.—They would pass for two-thirds of their aggregate length through British territory, and would not only open up markets for the produce of those districts and supply facilities for traffic, but in regard to the portion of Bundelkund traversed, would act as a protective work against the famines which are of periodic occurrence.

Thirdly.—They will utilize the sections already completed or under construction on the broad gauge between Agra and Gwalior and between Itarsee and Bhopal, which must inevitably be connected sooner or later.

Fourthly.—They present no engineering difficulty, the heaviest works (which occur between Itarsee and Bhopal) being already in course of construction; and the cost of the large bridge over the Jumna at Calpee having been provided for in the mileage estimate of £9,000.

Fifthly.—They could not be constructed and worked so cheaply by any other agency. Not only would the surveying and engineering staff of this Company be available, but a great absolute saving would be effected by the use of their plant and workshops in the carriage of materials and in the supervision which their existing establishments at home and in India would be able to supply.

Sixthly.—It would not be consistent with the interests of the shareholders of the Great Indian Peninsula Railway Company or of the Secretary of State who is equally benefitted with them by any increase in the prosperity of the G. I. P. Line to entrust the construction of the proposed lines to another Company or to permit the adoption of the different gauge than that of the sections already constructed.

9. Should the reasons now given be still deemed insufficient, I am to express a hope that the Secretary of State will before coming to final decision be pleased to ascertain the views of the Government of

India on the subject. The Board are induced to make this request because owing to the remarkable rapidity with which Railway, Commercial and Financial interests are advancing in India, it is not improbable that these proposals may present a different aspect to the authorities on the spot, and whose opinions cannot fail to carry weight with his Lordship in Council.—I am, &c.,

THOMAS R. WATT.

P. W., 1676.

INDIA OFFICE, S. W., 12th January, 1882.

T. R. WATT, Esq., Great Indian Peninsula Railway Company.

SIR,—I am directed by the Secretary of State for India to acknowledge receipt of your letter of the 21st November last, No. 143, again representing the advantages which, in the opinion of the Directors of the Great Indian Peninsula Railway Company, would be obtained from the extension of the railway, beyond Bhopal to Gwalior and Cawnpore, and explaining in detail the financial arrangements under which the line in question might be carried out by the Company.

In reply, I am instructed to inform you that, after giving full consideration in Council to the representations now made by the Board, Lord Hartington has not been able to alter the views expressed in Sir Louis Mallet's letter of the 27th October last.

I am glad to add that a copy of this correspondence has been forwarded to the Government of India.—I am, &c.,

LOUIS MALLET.

No. 62 of 1882.

GREAT INDIAN PENINSULA RAILWAY COMPANY,

5th May, 1882.

The UNDER-SECRETARY of STATE for INDIA, India Office, S. W.

SIR,—Adverting to your letter of the 12th January last, in which you informed me in reply to mine of the 21st November 1881, proposing the construction, as an extension of this undertaking of lines from Bhopal to Gwalior and Cawnpore, that the Secretary of State had not been able to alter the views expressed in your previous letter of the 27th October, but that a copy of the correspondence had been forwarded to the Government of India, I am requested to inform you that the Directors of this Company continuing to attach great importance to the early construction of such lines, are prepared in concert with Sir H. Daly, K.C.S.I., and Major-General Trevor, R.E., to take the necessary steps for forming a Company to be incorporated under "The Companies Act, 1882," to be called "The Great Indian Peninsula Extension Railway Company, Limited," for the purpose of raising the requisite capital,* and constructing the lines in question upon the gauge of this Company's lines. In taking

* 385 miles, £9,000 a mile, estimated capital, *vide* my letter, No. 143, of 1881.

this step the Directors will follow the policy indicated as that desired by Government at page 4 of the Administration Report on Railways in India for 1880-81, where, "It is hoped that in future negotiations it may be found practicable to eliminate the question of any Government guarantee altogether, and to limit the State aid to grants of Government land, or mining rights, or other similar liberal concessions." The directors, therefore, desire to know whether the Government will find the land for the construction of these lines, and grant mining rights, and such other facilities as may be necessary for securing their early and economic construction and subsequent working, in which case they will be prepared to proceed with the formation of the new company.

As regards the working of these lines, the directors are of opinion that it should be entrusted to the Great Indian Peninsula Railway Company, upon the understanding that it is to be done on the most favourable terms consistent with no loss being occasioned thereby to the Great Indian Peninsula Railway Company, and as part of such working the control of the lines between Itarsee and Bhopal, and Gwalior and Agra, should be secured to the new Company.

As it is very important, in view to the successful formation of the new Company and the obtaining of the requisite subscription of the share capital, that no time should be lost in bringing the matter to the attention of the shareholders of the Great Indian Peninsula Railway and the public, I am to request the favour of an early decision and reply to this letter.—I am, &c.,

THOMAS R. WATT.

INDIA OFFICE, S. W., 22nd May, 1882.

T. R. WATT, Esq.

DEAR SIR,—I am instructed to say that if a deputation of three gentlemen, representing the promoters of the proposed extension of the Great Indian Peninsula Railway from Bhopal to Gwalior and Cawnpore, can come to this office to-morrow (Tuesday, the 23rd instant), at 3-30 p.m., a Committee of the Council will be happy to hear more in detail how it is proposed to carry out the scheme in question.—I am, &c.,

JULAND DANVERS.

On Tuesday, the 23rd May, 1882, the following gentlemen, namely, Colonel Holland, Mr. F. S. Chapman, Major-General Trevor, and Mr. Watt, being a deputation of the promoters of the extension project, had an interview at the India Office with a Committee of the Council. The deputation fully explained their proposals, and urged the importance of their early consideration; and they were informed that the answer of the Secretary of State would be duly given.

No reply being received, the same deputation of the promoters had an interview, on the 22nd June, 1882, with the Marquis of Hartington, then Secretary of State for India, and Sir Louis Mallet, the Under-Secretary of State, when they pressed upon his Lordship the advantages of the project in the public interests, and the importance of their

receiving an early decision, having regard to the then favourable condition of the money market for launching the scheme.

P. W. 830.

INDIA OFFICE, S. W., *5th July, 1882.*

T. R. WATT, Esq., Great Indian Peninsula Railway Company.

SIR,—The Secretary of State for India in Council has had under consideration your letter No. 62, dated the 5th May last, proposing the formation of a Company for the construction and working of a line of railway to connect the Great Indian Peninsula Railway with Cawnpore and Gwalior, the necessary capital for the undertaking being raised without any direct pecuniary assistance from the Government. The proposals made in this letter were further explained at a meeting held at this office between a Committee of the Council and representatives of the promoters of the project, and the views then expressed have likewise been considered by the Secretary of State in Council.

I am directed to inform you that the Secretary of State will be prepared to enter into an agreement with a company to be formed for the purpose of carrying out the proposed line of railway from Bhopal to Cawnpore and Gwalior, without direct pecuniary assistance from the Government, on terms to be arranged in detail, to the satisfaction of the Secretary of State in further communication with the promoters.

I am, therefore, to request that representatives of the promoters may be named by them, to meet persons appointed by the Secretary of State in his behalf, with a view of settling the terms of a draft contract to be submitted for final approval by the Secretary of State in Council, and acceptance by the proposed company. When such representatives have been named the further necessary steps will be taken for proceeding to draft the contract.—I am, &c.,

LOUIS MALLET.

3, NEW BROAD STREET, E. C., LONDON, *10th July, 1882.*

The UNDER-SECRETARY of STATE for INDIA, India Office, S. W.

SIR,—I have the honour to acknowledge the receipt of your letter of the 5th instant, regarding the proposed formation of a company for the construction and working of a line of railway to connect the Great Indian Peninsula Railway with Cawnpore and Gwalior. I am requested to inform you, in reply, that Major-General J. S. Trevor, R.E., Mr. Chapman and Mr. Watt have been appointed representatives to negotiate and settle with the gentlemen who have been nominated by the Secretary of State the term of draft contract, and this deputation will be happy to attend such an appointment for the purpose as may be fixed by you.—I am, &c.,

THOMAS R. WATT.

A meeting was accordingly held at the India Office on the 27th July, 1882, between the deputation abovenamed and the representatives of the Secretary of State when points to be embodied in draft contract were considered, and the deputation were informed that a draft contract would be forwarded to the promoters.

On the 5th December, 1882, Mr. Danvers forwarded to Mr. Watt draft of the contract.

3, NEW BROAD STREET, E.C., 18th December, 1882

The UNDER-SECRETARY OF STATE for INDIA, India Office, S. W.

SIR,—I am desired by the Provisional Committee of gentlemen interested in the project for constructing the line of railway from Bhopal to Gwalior and Cawnpore, to acknowledge the receipt of Mr. Danvers' note of the 5th instant, forwarding a draft of the contract which it is proposed they should enter into.

2. They wish me in the first place to point out that since the interview at the India Office on the 27th July last, circumstances have occurred which show that it will not be possible to get the requisite capital subscribed, either for this or any similar undertaking on the terms which were then discussed.

3. The feeling amongst the investing public evidently is that where, as in the present instance, the Government concede nothing but the and (a concession which it is well known, except in the case of the Presidency Towns, is of small financial value) it is hardly consistent with an invitation to co-operate that the Government should oblige them to contribute to the State a portion of their prospective revenue, and for the State at the termination of the ninety-nine years' lease, to take possession of the railway without payment of compensation.

4. The direct and indirect advantages accruing to the Government and the country from the opening up of railways are, it is considered, a far more than sufficient recompense for the small outlay for land, and it is evident from the way in which the Bengal and North-Western Railway project has failed in attraction to the investing public, that better terms must be offered, or English capital will not be obtained for new enterprises.

5. The Committee trust they may be pardoned for thus frankly representing the views which they have good reason to know are held by those likely to join in these undertakings. They have done so from a conviction that unless the terms of the proposed contract are modified in the sense now suggested, it cannot be expected that the project in question can be carried to a successful issue.

6. I am accordingly to request that the attention of the Secretary of State in Council may be drawn to clauses 41 and 62 of the draft contract, and to express a hope that he may be induced first to forego the condition of participating in profits, and secondly, to consent to replace the capital outlay on the termination of the lease by efflux of time. I am to point out that in the case of the Guaranteed Railways the liability to replace the capital is practically conceded,

and that without a provision to this effect, the power of raising money upon debentures would be a burden, instead of an advantage to the shareholders.

7. I am further to take exception to the terms contained in clauses 37 and 38. At the interview above referred to, it was understood that the maximum rates of the Great Indian Peninsula Railway should be binding on the new Company, a condition which affords ample protection to the public. Any restriction beyond this the Committee would not see its way to accept.

8. Referring to clause 33, I am to invite your attention to the fact that it does not specifically provide for the conveyance of the Company's traffic over the line between Gwalior and Agra, and for handling goods at the latter station. These are points to which much importance is attached, and in respect to which it is advisable there should be no room for misunderstanding. As regards other running powers, the Committee consider that these should be conceded, where necessary, to as well as by, the Company.

9. Having thus indicated the views of the Committee on the draft contract, I am to suggest that it might facilitate the further progress of the negotiations if two or more of their members were invited to attend at the India Office, in order personally to afford such information and explanation as may be deemed requisite.—I am, &c.,

THOMAS R. WATT.

P.W. 2667.

INDIA OFFICE, S.W., 15th February, 1883.

T. R. WATT, Esq., 3, New Broad Street, E.C.

SIR,—I am directed by the Secretary of State for India in Council to acknowledge receipt of your letter, dated the 18th December last, bringing to notice on behalf of the Provisional Committee interested in the project for constructing a line of railway from Bhopal to Gwalior and Cawnpore, certain alterations which that Committee desire to have made in the proposed draft contract between Government and the promoters of the line in question.

Since the receipt of your letter, the Committee have met the representatives of the Secretary of State, and a very full discussion in respect to the several points raised has taken place.

A report of that discussion, together with your letter of the 18th December last, has now been laid before Lord Kimberley in Council; and I am desired to inform you that, concurring in the opinion which he understands was expressed by the Committee that the present would be an inopportune time for bringing out the scheme; and that it would not be possible to raise the needful capital, his Lordship considers that further discussion or negotiations in respect to its details should be postponed until the promoters find that the circumstances of the money market are such as to afford a reasonable prospect of success in any attempt to form a Company.—I am, &c.,

J. K. CROSS.

3, NEW BROAD STREET, E.C., LONDON, 19th March, 1883.

The UNDER-SECRETARY of STATE for INDIA, India Office, S.W.

SIR,—With reference to your letter of the 15th ultimo, regarding the negotiations in respect of the proposed railway from Bhopal to Gwalior and Cawnpore, I am requested by the Provisional Committee to state that they have reason to believe that the time is approaching when the conditions of the money market are likely to be favourable to the successful issue of the project to the public. The Committee are, therefore, anxious to receive an early definite reply to the proposals which have been submitted by them to the Secretary of State, and they would suggest that it might facilitate disposal of the business if a deputation of their members were again to meet the gentlemen who have the matter under consideration at the India Office.—I am, &c.,

THOMAS R. WATT.

3, NEW BROAD STREET, E.C.,
LONDON, 25th April, 1883.

To the UNDER-SECRETARY of STATE for INDIA, India Office, S. W.

SIR,—I am desired by the Committee of gentlemen interested in the Bhopal extension to request the favour of a reply to my letter dated the 19th March last.

2. This project, the advantages of which are fully recognised, was brought to the notice of the Secretary of State a year-and-a-half ago (letter No. 119, dated 10th October 1881), and since then no efforts have been wanting on the part of the Committee to obtain such terms as would enable them to undertake it with a reasonable prospect of success.

3. Relying on the public declaration of policy contained in the Administration Report on Railways in India for 1880-81, to the effect that “when any” reasonable prospect of success presents itself an endeavour should be made to encourage the raising of capital through private agency, on “the exclusive security of the success of the undertaking,” and that it was hoped that it would “be found practicable to eliminate the question of any Government guarantee” altogether, and to limit the State aid to grants of Government land or mining rights, “or other similar liberal concessions,” the Committee in my letter No. 62, dated the 5th May 1882, offered to form a company to construct the line on the simple condition that the Government would provide the land.

4. After further correspondence and personal interviews, a draft contract was received with Mr. Danvers’ note of the 5th December 1882, which contained the following provisions:—First, that instead of the land being granted in perpetuity it was to be given on a 99 years’ lease, at the expiration of which the entire property was to lapse to the State without compensation; and, secondly, that all profits in excess of six per cent. were to be divided between the State and the Company.

5 It was felt that these terms were not consistent with the ex-

pectations that had been previously held out. The example, too, of the Bengal and North-Western Company, followed as it was by the marked check given to all similar undertakings, made it evident that it would be impossible to obtain the requisite capital on the conditions sought to be imposed.

6. Accordingly, in my letter of the 18th December 1882, the Secretary of State was requested to reconsider the two provisions referred to, involving, as they did, the broad principle whether the State was to lay claim to a direct share in property created by private enterprise. Communications, both official and through other channels, have since been made, urging with special reference to the altered conditions of the money market that an early decision might be arrived at.

7. The negotiations have now extended over a very lengthened period; and the Committee must express their extreme disappointment at the manner in which their persistent attempts to give effect to what they believed to be the policy of the Secretary of State, as expressed, in Parliament and elsewhere, have been received. They are confident that had the offer submitted by them in May last, when the market was in a favourable condition, been accepted, considerable progress would already have been made towards the completion of this very important work.

8. Representing, as they do for the most part, the Directors of the Great Indian Peninsula Railway, the Committee believe that the time is at hand when it will be possible for them to raise the capital on the terms proposed in my letter, dated the 18th December 1882, for the construction of a line which is practically an extension of their existing prosperous system, and of the success of which they are confident. Pending, however, the settlement of the contract, it is of course impossible for them to take further steps towards the formation of a company, and they are apprehensive lest in the meantime they may again lose the opportunity for raising the capital. On these grounds I am to reiterate a request for an early decision.—I am, &c.,

THOMAS R. WATT.

P. W. 696.

INDIA OFFICE, S. W., *9th May*, 1883.

T. R. WATT, Esq., 3, New Broad Street, E. C.

SIR,—In reply to your letter of the 25th ultimo, I am directed to inform you that the Secretary of State for India in Council is prepared to resume negotiations with the promoters of the proposed line of railway from Bhopal to Gwalior and Cawnpore, and that representatives on his behalf will be ready to discuss terms with representatives on behalf of the promoters if it is convenient to the latter to attend at this office on Friday next, the 11th instant, at 2-30 o'clock.—I am, &c.,

LOUIS MALLET.

The deputation had accordingly another interview at the India Office, on the 11th May, 1883, with the representatives of the Secre-

tary of State, when the objections taken to points in the draft contract were fully discussed, and the necessity of avoiding further delay in settling the terms of agreement was strongly dwelt upon by the deputation.

3, NEW BROAD STREET, E. C., LONDON, 18th May, 1883.

The UNDER-SECRETARY OF STATE for INDIA, India Office, S. W.

SIR,—I am now requested by the Provisional Committee for promoting the construction of the railway from Bhopal to Cawnpore and Gwalior, to forward a copy of the draft contract received with Mr. Danvers' note of the 5th December, 1882, with such alterations made in it as appear to the Committee necessary to give effect to the object in view.

The chief alterations are as follow, namely :—

1. To provide for the repayment to the Company of the capital expenditure on the expiration of the contract by effluxion of time.
2. To secure to the Company running powers over Sindia's State Railway between Gwalior and Agra.
3. The omission of Clauses 37 and 38, bearing upon through rates and of Clause 41 as to division of profits.

As regards alteration No. 1, the Committee, with reference to the interview which some of their members had with the representatives of the Secretary of State at the India Office, on the 11th instant, submit for consideration as an alternative, and (in their opinion) a preferable proposal, that if the Secretary of State will not agree to the repayment of the whole of the capital outlay upon the railway, he will accept the obligation to meet, either by payment, or by taking over (at his option) the amount of debenture debt existing at the termination of the contract by efflux of time, in addition to paying at a valuation for the rolling-stock and plant; and that he will give to the company a guarantee of interest at the rate of four per cent. per annum for ten years from the complete opening of the railway for public traffic, to be repaid out of profits in excess of 5 per cent. The Committee believe that this guarantee will not, as a matter of fact, involve the Secretary of State in any expenditure whatever, but that it will have a most important effect in inducing the investment of English capital in the construction of the line.

The other alterations proposed in the technical language of the contract are suggested by the legal advisers of the Committee; and as to these I have to request that (should there be any difficulty experienced on the part of the Secretary of State in accepting them) the Committee's advisers may be allowed to meet and settle the exact terms to be adopted with the legal advisers of the India Office.

I am further to state that the Committee are of opinion that it is desirable the new Company should be named the Great Indian Peninsula Extension Railway Company, Limited, as at first proposed, and they trust there may be no objection on the part of the Secretary of State to the adoption of this title.—I am, &c.,

THOMAS R. WATT.

3, NEW BROAD STREET, E.C., LONDON, 15th June, 1883.

The UNDER-SECRETARY OF STATE for INDIA, India Office, S. W.

SIR,—With reference to my letter of the 18th May last, returning with alterations the draft of the proposed agreement for the construction of Railway between Bhopal and Gwalior and Cawnpore, I am requested by the Provisional Committee to express the hope that they may be favoured with an early reply to their proposals. In doing so, I am further requested to ask particularly for the decision of the Secretary of State on the alternative proposal for a temporary four per cent. guarantee the Committee having reason to believe from the information they have since gathered, that if it is the wish of the Government that the line should be constructed without delay, the alternative of a guarantee is that which must be adopted.—I am, &c.,

THOMAS R. WATT.

P. W. 870.

INDIA OFFICE, S. W., 31st August, 1883.

T. R. WATT, Esq., 3, New Broad Street.

SIR,—The proposals contained in your letters of the 18th May and 15th June, regarding the terms on which the promoters of the Bhopal-Gwalior and Cawnpore Railway are prepared to proceed with that undertaking, have received the careful consideration of the Secretary of State in Council.

I am directed to inform you that Her Majesty's Government having decided to move that the subject of provision for the extension of railways in India shall be referred to a Select Committee of the House of Commons next Session. Lord Kimberley does not deem it expedient, pending the result of that enquiry, to enter into an arrangement with you on the basis proposed in your letters.—I am, &c.,

LOUIS MALLET.

No. 167 of 1883.

GREAT INDIAN PENINSULA RAILWAY COMPANY,

10th December, 1883.

The UNDER-SECRETARY OF STATE for INDIA, India Office, S. W.

SIR,—I have the honour to forward, for submission to the Right Honourable the Secretary of State for India in Council, the following copy of a resolution passed at the half-yearly general meeting of the proprietors of this Company, on Friday, the 7th instant, in relation to the question of the proposed railway from Bhopal to Gwalior and Cawnpore, namely :—

“It was moved by J. Jennings, Esq., seconded by Robert Minton, Esq., and resolved: That in the opinion of this meeting it is most important than the extension railway from Bhopal to Gwalior and

Cawnpore be constructed with as little delay as possible on the 5 ft. 6 in. gauge, and that the Directors be requested to communicate this opinion to Her Majesty's Secretary of State for India in Council."—I am, &c.,

THOMAS R. WATT.

P. W. 2417.

INDIA OFFICE, S.W., 21st December, 1883.

T. R. WATT, Esq.

SIR,—I am desired by the Secretary of State for India in Council to acknowledge receipt of your letter of the 10th instant, transmitting copy of a resolution passed by the shareholders of the Great Indian Peninsula Railway Company at a general meeting on the 7th instant, in support of an early prosecution of the projected railway from Bhopal to Gwalior and Cawnpore.

In reply, I am directed to refer you to a letter from this office, dated the 31st August, 1883, on the subject of the projected line.—I am, &c.,

HORACE WALPOLE.

No. 304 OF 1883.

BOMBAY CHAMBER OF COMMERCE, 21st November, 1883.

To the Right Honourable the EARL of KIMBERLEY, Her Majesty's Principal Secretary of State for India.

The Memorial of the Bombay Chamber of Commerce

RESPECTFULLY SHEWETH,—That the proposal which has been made to your Lordship by the G. I. P. Railway Company to extend the Bhopal line of railway through Lalitpur and Jhansi to Gwalior, with a branch from Jhansi to Cawnpore, a total length of about 385 miles, would, if effected, be of great benefit to India.

That the proposed line would connect the G. I. P. with the E. I. Railway systems by continuous broad gauge lines, and, while opening out a country which is populous and fertile, and known as a large wheat and teelseed-producing district, would shorten through communication between Cawnpore and Bombay by a distance of 115 miles.

That the proposed extension presents no engineering difficulties, and that its construction is estimated by the G. I. P. Railway Company at the moderate cost of £9,000

a mile, which includes the cost of the large bridge over the Jumna at Calpee.

That the line between Bhopal and Cawnpore would, as shown by the Government of India, if carried via Mhow, Ranipur and Tehree, act as a protective line to Bundelcund, which is subject to periodical drought, and that the Government of Bombay consider that it would be preferable to any other line intended to shorten the railway route between Bombay and the North-West Provinces.

That the Agent, Governor-General for Central India, has declared that the scheme was one which, after the fullest consideration and consultation with all the authorities connected with that part of India, he had accepted and adopted as an absolutely indispensable line for opening out that most important province; that the country which it would open cut from Bhopal to Gwalior was, in the lower portions, exceedingly rich in wheat and well peopled, and certainly there were no great difficulties in the way of railway construction; that in the neighbourhood of Bhopal and Bhilsa the production of wheat was so enormous in good years that it lay rotting on the ground, because there were no means of exportation; and he believed that, above Bhilsa, and between Jhansi and Gwalior which he knew well, the country was fertile and populous.

That while we have thus the united testimony of the highest authorities in India to the expediency of this scheme as a protective, and locally reproductive work, your memorialists respectfully desire, in addition to the reasons already mentioned, to urge upon your Lordship the great importance of its immediate construction for the further development of the Indian wheat trade, which, notwithstanding the competition of America, Russia, and other countries, is now assuming great imperial proportions. The progress of this trade will be seen from the following statement of the exports of wheat extracted from the Accounts relating to the Trade and Navigation of British India, published by the Government of India, viz. :—

			Cwts.
In the year ending 31st March 1880 ...	...	...	2,195,550
Do. do. 1881 ...	...	...	7,444,499
Do. do. 1882 ...	...	...	19,863,520
Do. do. 1883 ...	...	...	14,151,765
In the 6 months ending 30th September 1883.			15,636,786

We desire also to invite the favour of your Lordship's at-

tention to the account of the trade given by the Government of India in paras. 153 to 194 of their Financial Statement for 1883-84, published in the *Gazette of India* on 17th March 1883, and particularly to para. 168, which treats of the capability of increased wheat production in India, and runs as follows :—“Some high authorities are of opinion that under favourable conditions as regards the prospect of a market, it would be possible within a few years to double the amount of wheat available for export, that is to say, to increase it to about 40 million cwts. There can be no doubt that very large quantities of land are awaiting cultivation, especially in the Punjab, Burma, Assam, and the Central Provinces. In the eastern districts of the Central Provinces, the new lines of railway will now open out a very large tract of wheat-producing country, which up to the present time has been unable to find a market for its surplus produce owing to defective means of communication.” The same remarks are especially applicable to the wheat and teelseed-producing districts of Central India, and the proposed line, while multiplying produce and increasing the national wealth, would secure the further advantage to the trade that, when there was a large influx of traffic, which either the East Indian Railway, or the Great Indian Peninsula Railway was, from whatever cause arising, unable to carry, (and such blocks have recently been of frequent occurrence,) whether from breaching by floods, or deficient working power, or from inadequate warehouse, dock or shipping accommodation, a free outlet for the trade would be available at the other Port.

That your memorialists believe that India could, with proper and adequate railway facilities, supply the whole of the wheat required by England, as well as a large quantity of that required by the Continent, and that it is incumbent on the Government to develop these capabilities by means of largely extended railway communications, which augment the land revenue, and at the same time promote the best interests of the people and of commerce. And they desire respectfully to urge that the great and important advantages which the country would derive from the construction of the proposed line entitle it to your Lordship's early and favourable consideration.

That, as the Government of India recognize more fully every year the advisability of increased railway communications, and the proposed line, in the opinion of your memo-

rialists, is of very great importance, it will sooner or later be made; and they believe that there are no serious obstacles to its construction, which could not long ere this have been removed.

For these reasons your memorialists pray that your Lordship may be pleased to accord your immediate sanction to the construction of the proposed extension of the Bhopal line of railway through Lalitpur and Jhansi to Gwalior, with a branch from Jhansi to Cawnpore.

And your memorialists, as in duty bound, will ever pray.

For and on behalf of the members of the Bombay

Chamber of Commerce,

JAMES THORBURN,

Chairman, Bombay Chamber of Commerce.

J. GORDON,

Secretary, Bombay Chamber of Commerce.



BOMBAY CHAMBER OF COMMERCE, 21st November, 1883.

The SECRETARY to GOVERNMENT, Public Works Department, Railway, Bombay.

SIR,—I have the honour to enclose 25 copies of the memorial of the Chamber to Her Majesty's Principal Secretary of State for India praying that His Lordship may be pleased to accord his immediate sanction to the construction of the extension of the Bhopal line of railway through Lalitpur and Jhansi to Gwalior, with a branch from Jhansi to Cawnpore.

The Committee of the Chamber desire me respectfully to request that His Excellency the Governor in Council may be pleased to forward this memorial to the Secretary of State at his early convenience, and also to the Government of India; and they further desire me to express their hope that His Excellency will kindly, in forwarding the same, strongly recommend that immediate sanction may be given to the construction of the proposed railway.—I have, &c.,

J. GORDON, Secretary.

BOMBAY CHAMBER OF COMMERCE, 23rd November, 1883.

To the SECRETARY of the LONDON CHAMBER of COMMERCE.

DEAR SIR,—I am directed by the Committee of this Chamber to forward to you, by book post, five copies of the Memorial which they have addressed to the Secretary of State for India, praying that His Lordship may be pleased to accord his immediate sanction to

the construction of the extension of the Bhopal line of railway through Latitpur and Jhansi to Gwalior, with a branch from Jhansi to Cawnpore. The construction of this line would have a very important effect upon the trade of India, import as well as export, and the Committee would feel grateful to your Chamber if they would kindly address the Secretary of State in support of the prayer of the Memorial.—I remain, &c.,

J. GORDON, Secretary.

No. 1964 OF 1883.

PUBLIC WORKS DEPARTMENT (RAILWAY),
BOMBAY CASTLE, 3rd December, 1883.

To the SECRETARY CHAMBER of COMMERCE, Bombay.

SIR,—I am directed to knowledge the receipt of your letter dated 21st November 1883, and to inform you that the memorial therewith submitted relating to the extension of the Bhopal line of railway to Cawnpore and Gwalior will be forwarded to the Secretary of State for India by next mail, a copy being sent to the Government of India.

2. The Governor in Council will express to the Secretary of State his regret at the delay which has taken place in arranging for the construction of this railway, the importance of which, both as a trade route and a protective line is, His Excellency understands, fully recognised by the Government of India, and he will strongly urge that it should be at once carried out on the 5' 6" gauge.—I have, &c.,

H. F. HANCOCK, Colonel, R.E.,
Joint-Secretary to Government.

THE INCORPORATED CHAMBER OF COMMERCE OF LIVERPOOL,
SECRETARY'S OFFICE, LIVERPOOL, 13th December, 1883.

J. GORDON, Esq., Secretary Chamber of Commerce, Bombay.

DEAR SIR,—I am in receipt of your letter of the 23rd of November, handing copy of memorial addressed by your Chamber to the Secretary of State for India, praying that His Lordship may be pleased to accord his sanction to the construction of the extension of the Bhopal line of railway through Lalitpur and Jhansi to Gwalior, with a branch from Jhansi to Cawnpore, and asking this Chamber to address the Secretary of State in support of the prayer of your Chamber.—I remain, &c.,

WILLIAM BLOOD, Secretary.

84-85, KING WILLIAM STREET, LONDON, E.C.,
THE LONDON CHAMBER OF COMMERCE, 14th December, 1883.

J. GORDON, Esq., Chamber of Commerce, Bombay.

DEAR SIR,—Your letter of the 23rd of November last reached me yesterday, and I had the pleasure of submitting it to the monthly Council Meeting of my Chamber, which was held the same afternoon.

As, however, time did not permit of the consideration of your letter by our Executive Committee, it was, as is usual in our procedure, referred back to that Committee in order that such action, as may be deemed necessary, should be recommended to the Council.

I shall have pleasure in advising you further as soon as the matter has come before my Committee.—Believe me, &c.,

KENRIC B. MURRAY, Secretary.

MANCHESTER CHAMBER OF COMMERCE, *9th January, 1884.*

J. GORDON, Esq., Secretary Chamber of Commerce, Bombay.

DEAR SIR,—I beg to acknowledge receipt of your letter of the 23rd November last, accompanying five copies of memorial of your Chamber as addressed to the Secretary of State for India, praying for the extension of the Bhopal line of railway to Gwalior, with a branch from Jhansi to Cawnpore.

I am also in receipt of your letter of the 7th December last, accompanying copies of letter of your Chamber recommending the Government of India to borrow money for public works, to be applied to the payment of interest “on the capital required to be raised to construct State Railways on a large and comprehensive scale, within the next few years ; or to supplement by way of loan the capital of existing railways, &c., &c.”

Your letter of the 7th ultimo arrived here on the morning of the 27th ultimo, a meeting of my Board being held on that day, and both letters were thereupon referred to a Committee appointed to take the whole subject into early consideration, the result of which I expect to be in a position to report to you shortly.—I am, &c.,

THOS. BROWNING, Secretary.

No. 452 of 1884.

P. W. DEPARTMENT (RAILWAY),
BOMBAY CASTLE, *6th March, 1884.*

TO THE SECRETARY BOMBAY CHAMBER OF COMMERCE.

SIR,—With reference to the letters from the Chamber of Commerce to the Secretary to Government, P. W. Department (Railway), dated respectively 21st November 1882, 4th December 1883, and 20th December 1883, I am directed by H. E. the Governor in Council to forward a copy of a despatch No. 1, Railway, dated 7th February 1884, received from the Right Hon'ble the Secretary of State for India in Council.—I have, &c.,

H. O. SELBY,
Under-Secretary to Government.

No. 1, RAILWAY.

INDIA OFFICE, 7th February, 1884.

To H. E. the Right Hon'ble the GOVERNOR in COUNCIL, Bombay.

SIR,—Your Excellency's Railway letters, marginally noted, transmitting representations which have been

Nos. 22, 23, and 24, dated respectively 6th, 12th, and 21st December, 1883.

addressed to you by the Bombay Chamber of Commerce in support of the projected Nagpur-Bengal and Bhopal-Cawnpore

Railways, and against the adoption of the metre gauge on the Jhansi-Manickpur Railway, together with the opinions of your Government thereon, have received my careful consideration in Council.

The views of the Chamber of Commerce, which are supported by your Excellency's Government, as to the importance of the construction on the broad gauge of the projected Nagpur-Bengal and Bhopal-Cawnpore Railways will not fail to receive attention when it is determined to proceed with the lines in question, but, as your Excellency is aware, no steps will be taken to negotiate with any Company for carrying out those projects until the Select Committee of the House of Commons, which is to be appointed early in the ensuing session, has concluded its enquiries.

3. With regard to the question of gauge on the Jhansi-Manickpur Railway, I have to observe that the metre gauge was adopted after full consideration, and that I see no reason for departing from the decision arrived at. I transmit, for your Excellency's information, that portion of my despatch to the Government of India which dealt with this particular point :—

“ With reference to the question of the gauge on which the line should be made, you state the reasons which have led to your conclusion that the 5' 6" gauge should be adopted. This, it appears, will involve a very large outlay in excess of the amount originally estimated as sufficient, and on the revised estimates an additional outlay of £2,70,000 over the sum needed for a metre gauge line would be requisite. Having in view the restricted means which must necessarily continue to be at the disposal of your Government for the prosecution of railways, and particularly for those not likely to be remunerative, and looking to the probable limited traffic that may be anticipated to pass over the line, I have not been satisfied that this additional expenditure would be justified.

“ The urgent representations made by your Excellency's Government as to the necessity of an early extension of railways to districts which are not yet provided with them renders it imperative that every possible economy in first outlay should be secured, and in the present case the balance of argument appears to me to lead to the conclusion that the least costly description of line must be preferred. The well known precarious rainfall in the districts to be traversed, the relatively small population, only about 220 to the square mile, and the depressed condition of the agricultural classes, give almost certain indications that the traffic will be small in comparison with that of more favoured districts of the North-Western Provinces, while the traffic, even in Oudh from the agricultural wealth and population of which

Bundeleund is very far removed, is so moderate as to fall altogether below the capacity of a metre gauge line."

4. It does not follow that the main line from Bhopal to Jhansi and from thence to Gwalior and Cawnpore should likewise be constructed on the metre gauge. When the scheme of the projectors was before me, no other gauge than the 5' 6" was proposed.

5. I desire that replies may be made to the representations of the Bombay Chamber of Commerce in accordance with this despatch.—
I have, &c.,

KIMBERLEY.

APPENDIX FF.

THE NAGPUR-BENGAL RAILWAY.

CALCUTTA, 29th November, 1881.

From BENGAL CHAMBER to the GOVERNMENT of INDIA.

Referring to certain correspondence which took place in the beginning of last year on the subject of a direct line of railway from Calcutta to Bombay *via* Nagpur, I am directed by the Committee of the Chamber to address you again on the subject.

The Committee observe from the Central Provinces Administration Report for 1880-81, page 140, that Government sanction had been given to an extension of the Nagpur and Chutteesgurrh State Railway to Nandgaon, that estimates were to be submitted in August last for the continuation of the line to Raipur, and that a survey is in progress of a further section from Raipur to Bilaspur. It is also stated that "the question of extension on from Bilaspur to join the Bengal system of railways has also been taken up and is now under consideration." It is specially with regard to this last-mentioned extension that the Committee of the Chamber desire to address the Government.

Before doing so, however, I am desired to renew, in the strongest manner, the Committee's expression of regret that the construction of the line from Nagpur to meet the Bengal system of railways was commenced and is being continued as a narrow gauge railway. The inconveniences and loss of revenue attending a break of gauge are so manifest on the Rajputana Railway, that it was hoped the mistake, which it is now admitted was made, in constructing that as a narrow gauge line, would have been avoided in making other main trunk lines in India, such as the direct railway from Calcutta to Bombay *via* Nagpur is destined to become in the near future. The Committee believe that when the line in question is extended to Bengal, the necessity for its reconstruction as a broad gauge one will become so pressing that it will have to be re-laid. This view is very strongly held by the mercantile communities interested in the proposed line, and the Committee trust it is not yet too late to ask for a reconsideration of this most important question before further expense is incurred in laying down any additional mileage on the metre gauge. In any case, if financial or other considerations preclude such a reconsideration at the present time, the probability of the line having to be re-laid as a broad gauge one, at no very distant date, should be kept in view in constructing the buildings, stations, and permanent way. The Committee hold very strongly that it would be true economy in the end to sanction the additional outlay required for the construction of the line as a broad gauge one from the very outset, and they have seen no sufficient arguments brought forward hitherto to support an opposite conclusion. Their opinion is much strengthened by the

publication of a very instructive paper in the *Pioneer* newspaper of 22nd instant, entitled "The Railways of India." The figures given there show that while the broad gauge lines throughout India earned last year nett profits amounting, on an average, to 5·28 per cent. on the capital expended, the metre gauge lines earned during the same period an average of only 2·65 per cent. With these facts before them the Committee deem it superfluous to bring forward further arguments in support of the views expressed above.

With regard to the extension of the line from Bilaspur to Bengal, the Committee have considered the alternative routes which have been suggested, viz. : (1) from Barrakur on the East Indian Railway through Chota Nagpur to meet the Chutteesgurh line, and (2) a direct line from Calcutta or Howrah to Midnapore, and thence *via* Sumbulpore to Nagpur. The latter is not only the shortest and most direct route, but is, in the opinion of the Committee, in every respect preferable to the other.

The chief argument in favour of the Barrakur route is the fact that by its adoption an existing line of 143 miles of railway out of a total length of, say, 387 miles from Howrah to Sumbulpore by that route can be more fully utilised. The Committee are informed, however, that the distance from Howrah to Sumbulpore *via* Midnapore is only 292 miles, so that the question appears to be whether a *detour* of nearly 100 miles is to be made in order to save the first cost of constructing from 45 to 50 miles of railway. To make such a *detour* would largely nullify the advantages of the line as a direct route to Bombay, and would handicap Calcutta in the competition which must necessarily take place for the traffic which may be expected to flow to the line.

The Committee are therefore very strongly of opinion that the direct route from Calcutta to Midnapore should be followed, unless insuperable obstacles are found to exist. The only objection of any weight which the Committee have heard alleged against the Midnapore route is the difficulty and expense of bridging the Damoodah, Roopnarain, and Cossye rivers. The difficulty, it is believed, is now much less than it was in former years, owing to the operations of the Bengal Irrigation Department in controlling these rivers and other waterways along this route. As against the question of expense, it should be borne in mind that the route in question being the shorter in point of mileage, and passing through a more level country, a large permanent saving in working the line would be gained by its adoption. This may fairly be set off against any increase in first cost of construction as compared with the alternative route *via* Burrakur. The country through which a direct line to Midnapore would pass is a far richer and more populous one than that from Burrakur, and the local traffic would be immeasurably greater. Besides this the Midnapore line would serve much more effectively to open up the important province of Orissa, and to accommodate the passenger traffic flowing from all parts of Bengal to Juggurnath and Pooree, than any other route that could be followed. To afford communication with the North-West and Behar, and to open up Chota Nagpur, the Gya State line might be continued in a southerly direction to join the main direct line, while, on the other side, a branch to Cuttack would connect Orissa with the general railway system of India. The argu-

ments in favour of the Midnapore route are indeed so numerous and conclusive that the Committee do not anticipate any serious attempt will be made to set them aside.

The Committee are not acquainted with the views and intentions of Government in the matter, but they have learned incidentally that a party has been appointed to assemble at Burrakur to survey that route. While expressing their gratification that steps are being taken to place the Government in possession of the information necessary to enable them to come to a decision regarding one of the routes proposed, the Committee trust the survey referred to does not indicate any desire to overlook the superior advantages of the more direct route *via* Midnapore. It is probable that Government are already in possession of detailed information regarding the latter route, but if such is not the case, the Committee submit that the data will be imperfect unless a simultaneous survey of the country *via* Midnapore and Sumbulpore be undertaken during the present cold weather.

In addition to the advantage which would result to through passengers and mails from the shortening of railway communication between Calcutta and Bombay by some 260 miles if the direct route *via* Midnapore, Sumbulpore, and Nagpur, is opened up, it is of very great importance to afford the shortest possible outlet for the surplus agricultural produce of the rich districts of the Central Provinces at present land-locked. When it is considered that the centre of the districts in question is only 400 miles distant from Calcutta in a straight line, it is evident that the Port of Calcutta has a more than ordinary interest in seeing that the most direct route is adopted, as it can only hope to attract produce if land carriage is reduced to a minimum. It may also not be out of place to allude to the importance of such a line in the event of a famine again occurring in the districts traversed by it, which, beyond Midnapore, are more liable to such visitations than other parts of the country favoured by a more regular rainfall. The fact that the line would also pass through a tract of country rich in mineral deposits, and that it would open up the Hinger coal-field, from which it would derive an abundant supply of cheap fuel, are not the least of the many advantages which can be claimed for this route.

The Committee trust that the considerations they have adduced in favour of the broad gauge and of the most direct route will be duly weighed by Government before a final decision regarding these points is arrived at. At the same time they would deprecate any avoidable delay in the execution of the important project of shortening the route to Bombay.

No. 166 R.

Calcutta, 13th January, 1882.

From GOVERNMENT of BENGAL to the GOVERNMENT of INDIA.

With reference to the communication, dated 29th November, addressed to you by the Bengal Chamber of Commerce, on the subject of a direct line of railway from Calcutta to Bombay *via* Nagpur, copy of which has been forwarded to this Government with the request that support may be given to the proposals made, I am directed

to state that the Lieutenant-Governor quite agrees with the Chamber that any line connecting the East Indian Railway with the Great Indian Peninsular should be constructed on the broad gauge. Undue weight must not, however, be attached to the argument brought forward by the Chamber, that while the lines on the broad gauge have earned 5·28 per cent. net profit last year, those on the metre gauge have only earned 2·65, and that, therefore, it would be true economy to sanction the additional outlay required by the former. No mention is made of the fact that the average age of the broad gauge lines was 13·09 years, during which time the traffic had been fully developed, whereas the average age of the metre gauge lines was only 5·30 years. Further, all the railways most likely to prove remunerative were naturally taken up first, so that no fair comparison of this nature can be made. Narrow gauge lines are of course cheaper to construct than those on the broad gauge; they fulfil the requirements of feeders, and are suitable for lines other than the great trunk railways; but in the Lieutenant-Governor's opinion, they do not answer the requirements of such lines as that now proposed, connecting two broad gauge railways; but no cheapness in construction can possibly be a set-off against the delay, inconvenience, and expense that will attend a double break of gauge.

2. If the only object in view were to connect Calcutta and Bombay by the shortest possible route, that *via* Midnapore and Keonjur would be the best; but any line in that direction would traverse an immense distance of unproductive country, from which no local traffic can be expected. The opening out of the country by branch and connecting railways, which will also prove useful for the relief or mitigation of famines, should such unhappily again occur, is, in the Lieutenant-Governor's opinion, of far more importance than providing a second line of direct communication by the shortest possible route, especially when, as in the present instance, a first class trunk railway connects the two capitals. Orissa may be served by a branch taking off from the Nagpur line somewhere in the neighbourhood of Sumbulpore, while for the wants of the lower portions of the Midnapore and Balasore districts, the East Coast Canal, now under construction, will fully suffice.

3. For these reasons Sir Ashley Eden is not prepared to support the views of the Chamber of Commerce in respect to the construction of a through direct line of railway to Bombay *via* Midnapore.

CALCUTTA, 9th March, 1882.

FROM BENGAL CHAMBER to the GOVERNMENT of INDIA.

With reference to the communication which I had the honour to address to you on the 29th November last, upon the subject of a line of railway from Calcutta to Nagpur, I am directed to state that the Committee have duly considered the letter from the Government of Bengal to the Government of India, under date of the 13th January. They have also been honored by an interview with the Hon'ble Mr. Gibbs, member of Council for Public Works, and Colonel Trevor, Secretary to the Government of India.

2. The Committee are unable to abandon their convictions as to

the preferable character of a broad gauge. They recognize, as a matter of course, the cheaper cost of the narrow system, and are not insensible to the advantage of constructing, with a given capital, the greatest possible length of rail. They are, however, not satisfied that the saving in construction is sufficient to counterbalance the economy in rolling-stock, in repairs, and in mileage charges, which they understand are effected by the broad gauge; for the attraction of sufficient capital is merely a matter of guarantee of adequate interest, whereas the lowest mileage charge consistent with profitable working is permanently material to success.

3. At the same time they have no rooted antipathy to the narrow gauge *per se*. They infinitely prefer such a railway to none at all, and if the responsible advisers of Government have decided that such an alternative is before the public, the Committee will cordially welcome any practicable scheme for a narrow gauge line.

4. If, however, it be decided to continue the construction of the line from Raipur eastward on the narrow gauge, the Committee would earnestly represent that such a decision should be conclusive against passing the traffic from the Central Provinces over the East India Railway. The Committee desire to echo the Lieutenant-Governor's opinion that "no cheapness in construction can possibly be a set-off against the delay, inconvenience and expense that will attend a double break of gauge;" and they would add that a considerable extra expense in first cost would be justified in order to avoid even a single break (to say nothing of toll to a foreign Company) in a line destined to carry large quantities of produce of low value, such as wheat, in the supply of which India may be said to have the rest of the world as competitors, and on which, therefore, it is essential to reduce to the minimum every charge up to delivery to the consumer. The difference in cost which determines the flow of trade is now-a-days often remarkably small.

5. The Committee think, moreover, that the existing resources of the East Indian Railway are in some very important respects already somewhat strained, and they believe that even a very large increase of its carrying and delivering power will be rapidly overtaken by the requirements of trade to and from the districts which are properly the sphere of its operations.

6. If, however, the Nagpur line were led into Howrah, with a junction there, or elsewhere, to the East Indian Railway, then such traffic as could afford and required transshipment might be sent round to the Calcutta side; whilst the remaining, and undoubtedly by far the larger, portion would be discharged direct into lighters and conveyed along-side ships.

7. And if hereafter Diamond Harbour should become an important place of shipment, a branch from the new railway through Tamluk to a point on the bank of the Hughly below the entrance of the Rupnarain, would enable vessels to load cargoes (particularly of grain) in the stream, and so relieve the traffic over the Diamond Harbour Railway and the pressure upon the projected docks, besides accommodating trades to which the cost of docking might prove deterrent.

8. The Committee desire to add that they are by no means wedded to the idea of running the line through Midnapore, although their

correspondence with that district does not confirm the Lieutenant Governor's view that such a line would pass through an "unproductive country from which no local traffic can be expected." Nor is the information which they have, from engineers of distinction, such as would lead them to anticipate that this route would prove comparatively a very costly one.

9. What the Committee have principally set before themselves is the necessity to Calcutta of obtaining access to the Hingur coal-field, and to that rich district of which Bilaspur and Raipur are approximately centres, and which has been termed the granary of India. Their main object is to reach these points in the cheapest manner consistent with efficient working and by as direct a line as may prudently be feasible, and they are well content to leave the choice of the exact route to Government; only praying that before a final decision is come to, a complete survey of the country towards Midnapore may be carried out.

BENGAL CHAMBER OF COMMERCE, CALCUTTA, 2nd May, 1883.

To the SECRETARY GOVERNMENT OF INDIA, Public Works Department.

SIR,—I am directed by the Committee of the Chamber of Commerce to forward, for the information of the Government of India, the accompanying papers, received from Mr. Franklin Prestage, C.E., Agent Eastern Bengal Railway Company, relative to the construction of a railway from Howrah to the Central Provinces *via* Midnapore and Chyebassa.

The papers referred to contain a mass of interesting information, and the Committee are glad to forward them; and at the same time to earnestly beg that early and attentive consideration may be given to the general scheme of communication with Central India.

The Committee are not however prepared to endorse all the recommendations made by Mr. Prestage, and they take exception to the proposal that the line in question shall be of the metre gauge.

The Committee having been already in communication with the Government on this subject, they desire me to place before you the following extract from their letter of the 9th March, 1882, and in the sense of the remarks therein submitted the Committee again express their hope that the Government will come to such a conclusion as will secure for the Port of Calcutta the great advantages that are to be derived from the agricultural and mineral resources of the districts which the proposed railway communication cannot fail to command:—

"The Committee desire to add that they are by no means wedded to the idea of running the line through Midnapore, although their correspondence with that district does not confirm the Lieutenant-Governor's view that such a line would pass through an "unproductive country from which no local traffic can be expected." Nor is the information which they have, from engineers of distinction, such as would lead them to anticipate that this route would prove comparatively a very costly one."

"What the Committee have principally set before themselves is

the necessity to Calcutta of obtaining access to the Hinger coal-field, and to that rich district of which Bilaspur and Raipur are approximately centres, and which has been termed the granary of India. Their main object is to reach these points in the cheapest manner consistent with efficient working and by as direct a line as may prudently be feasible, and they are well content to leave the choice of the exact route to Government."—I have, &c.,

H. W. I. WOOD, Secretary.

SIMLA, 17th August, 1883.

From the GOVERNMENT of INDIA to the BENGAL CHAMBER of COMMERCE.

With reference to your letter dated the 2nd May last, and to your previous communications (dated 29th November 1881 and 9th March 1882), I am desired to request that you will communicate to the Committee of the Chamber of Commerce the assurance that the question of railway communication between the Central Provinces and Bengal, and of the best route which such communication should follow, has for long past engaged the earnest attention of the Government of India.

2. This question, indeed, is of very old standing. As long ago as 1868, when railway extensions in Bengal were under consideration, a preliminary investigation took place. Mr. Leonard, C.E., Superintending Engineer, South Eastern Circle, and Mr. Vernon Schallch, concurred in preferring the Burrakur to the Midnapore route on account of "the enormously heavy waterway required" on the latter, and Mr. T. E. Ravenshaw, the Commissioner of Cuttack, pointed out the "enormous cost" which it would involve.

3. Passing over the intervening period during which the Midnapore district was thoroughly examined and surveyed in connection with the canals and protective embankments which have been constructed, I am to mention that the Government of India, when instructing the Government of Bengal in August 1881, to cause the three lines which had been suggested for connecting Burrakur and Bilaspur to be surveyed, added that "the Government of India, in considering the question of the direction of these lines, has preferred the northern lines to any running from Calcutta and Midnapore *via* Cuttack, because the railways, being undertaken to a great extent for famine protective purposes, it seems that the coast system of canals will partially protect this latter country, while it will be easy, in the future, to make a junction of the northern line from some point north of the Mahanadi river with Cuttack, should such a measure prove eventually desirable."

4. In consequence, however, of a desire that the line from the Central Provinces should pass from the neighbourhood of Chyebassa direct to Calcutta, rather than *via* Burrakur or Sitarampore, being still entertained in some quarters, orders were issued to the Engineer-in-Chief, Nagpur Railway Surveys, that in addition to locating the line from Sitarampore *via* Dugni and Raigurh to Bilaspur, provision

should be made for a careful reconnaissance from Dugni, *via* Midnapore, to Howrah, during the past cold season.

5. I am now desired to forward to you, for the information

1. Letter from the Bengal Government, No. 2948R., dated 28th July, 1883.

Mr. Spring's report and estimate for the route from Dugni to Howrah, dated 17th July, 1883.

Note by the Chief Engineer thereon, dated 28th July 1883. Mr. Parker's abstract estimate of the probable cost of a broad gauge railway from Sitarampore to Bilaspore.

2. Report by Mr. H. H. Risley, Deputy Commissioner of Manbhoom, on the trade of Chota Nagpur, No. 409R., dated 17th May, 1883.

3. Report by J. B. Fuller, Esq., Director of Agriculture, Central Provinces, on the trade and trade resources of Chhattisgarh, No. 240, dated 11th July, 1883.

in connection with the proposed line.

of the Chamber, the report of this reconnaissance, together with the comments of the Bengal Government thereon, and certain other information of importance in connection with the proposed line.

6. From these documents the following comparisons may be obtained :—

<i>Distance—</i>	Miles.	Miles.
Howrah to Sitarampore by East Indian Railway..	138	
Sitarampore to Dugni	95	
		233
Howrah to Dugni, <i>via</i> Midnapore.....		162
Difference of distance in favour of Midnapore route		71
<i>New line required—</i>		
Howrah to Dugni, <i>via</i> Midnapore.....		162
Sitarampore to Dugni		95
Difference, less construction, in favour of Sitarampore route.....		67
<i>New Capital required—</i>		
Howrah to Dugni, <i>via</i> Midnapore	Rs. 2,08,16,187	
Sitarampore to Dugni	80,14,942	
Excess by adoption of Midnapore route	1,28,01,245	

In addition, however, to the new line, if taken *via* Midnapore, being weighted by the necessity of raising and rendering remunerative 128 lakhs of additional capital, there can be no doubt that the expenses of working would be seriously enhanced by the absence of the cheap coal obtainable at Sitarampore, and the maintenance of the bridges and embankments in so difficult a country as that between Midnapore and Howrah. That country is intersected by canals and formidable rivers. The locality receives, moreover, the flood waters of a very large tract of country to the north, and is at times under water for miles. The flood especially passes between the Roopnarayan and Damooda, where even spring tides go two feet above the level of the country. These rivers are both tidal and navigable, and the former is very large. The bridges and flood openings between Midnapore and Howrah will cost 65 lakhs of rupees in construction, and much in maintenance, and will be permanently subject to danger from floods, and even cyclonic waves, such as that which in 1874 flooded the station of Midnapore. Possibly some of these objections might be partly met by taking the line more to the north, but this

would involve an increase of distance, without materially reducing the estimate.

7. As regards traffic, the section of the Midnapore route from that place to Dugni is very inferior in population and resources to the Sitarampore route, while the remainder is already well served by canals, on which steamers as well as boats can ply—conveyances, it may be observed, which might be formidable competitors of the railway. The contrast between the two is truly and effectively drawn in the 82nd paragraph of Mr. Risley's note. While considerations regarding local traffic are thus in favour of the Sitarampore route, those regarding through traffic show no balance in favour of its rival. Passengers and goods would indeed gain somewhat in time in reaching Calcutta, but they would arrive at Howrah on the west side of the Hooghly, instead of coming straight into Calcutta itself, over the bridge now under construction. But in cost it is probable that neither passengers nor goods would be gainers. The rates by the direct route would have to be calculated to cover interest on the extra 128 lakhs of rupees of capital, while the rates by the Sitarampore route would only bear interest on a share of the capital spent on the section of the East Indian Railway between Sitarampore and Calcutta, which would certainly amount to much less than the above difference. The working expenses, also, would, for the reasons already given, be higher, mile for mile, than on the Sitarampore line. It may be assumed, therefore, that no reduction in through rates would be likely to result from the reduction in distance, and that a ton of wheat from the Central Provinces could be carried as cheaply by the Sitarampore route as by the Midnapore.

8. It has been supposed in some quarters that the difficulties which the East Indian Railway has lately experienced in meeting the export trade were proof of the necessity for either two additional lines of rails, or a separate railway, in order to meet the extra traffic which the Nagpur Railway would bring to Calcutta. But those difficulties have arisen, not from inability in the East Indian Railway to carry, but from inability to discharge at Howrah with sufficient rapidity. With additional stock and shorter intervals between trains, which will of course be provided as required, a double broad-gauge line can convey a far larger traffic than this railway has ever been called upon to meet. It is very possible that at some future date, when the trade of the upper provinces and Chota Nagpur has attained a far larger development, a line from Dugni to Howrah or Hooghly may be found profitable, but at present there appears no ground for preferring it to the substantial advantage of the Sitarampore route.

9. Such being the conclusions irresistibly arrived at on the facts presented, it does not seem necessary to notice at any great length Mr. Prestage's proposals accompanying your letter. I am, however, to offer the following brief remarks on a few points :—

(a) Mr. Prestage's estimate of the cost of constructing the direct line is evidently much too low. It should be increased by 20 to 25 per cent.

(b) There are strong reasons for preferring the Calcutta side of the river to the Howrah side for wet docks.

(c) The estimate of 5,000 tons of wheat per diem obtainable from the Central Provinces appears very questionable.

(d) The prime cost of wheat must be the same, wherever it is

shipped from. It cannot vary in the proportion of 22'32 to 6'2, as stated in paragraph 3 of the note of 9th March.

(e) The supposition that after the opening of a through line, the Great Indian Peninsula Railway would maintain their present rates for wheat, and consequently allow Sheogan, only 340 miles from Bombay and 882 miles from Calcutta, to be the point from which the traffic would divide, is altogether inadmissible.

(f) The assumption that it would take two additional broad gauge lines from Sitarampore to Calcutta to convey the traffic brought to the former by a double metre gauge line is unintelligible. Moreover, if two extra lines will, as stated in paragraph 18 of the same note, be required for the traffic below Patna, it is evidently wrong to debit them in paragraph 26 to the Sitarampore project.

(g) If there be a likelihood of any such traffic as Mr. Prestage assumes, it is obvious that the broad gauge would be preferable to the metre. Metre-gauge stock of such a nature that the paying hauled load per train shall be fully equal to that on the broad gauge, which Mr. Prestage is understood to contemplate, is at least beyond present experience. There is, however, every reasonable probability of traffic sufficient to warrant a line on the latter gauge, which is the more necessary in that the connection at either end will be with broad-gauge lines.

(h) The reason for debiting the Sitarampore project in paragraph 26 with the whole cost of the bridge at Hooghly, and of docks at Diamond Harbour (or elsewhere on the east of the river), and with two-thirds of the cost of a central passenger and goods station at Calcutta, is not apparent, seeing that these are in course of being provided independently of it.

(i) The concessions and conditions proposed in the memorandum No. 2 do not appear likely to commend themselves to the money market, neither are they such as the Government of India could entertain.

The above remarks are not intended to be in any way exhaustive, but merely to indicate some of the principal preliminary objections to Mr. Prestage's proposals.—I have, &c.,

W. S. TREVOR, Col.; R.E., Secretary.

BENGAL CHAMBER OF COMMERCE,

CALCUTTA, 26th September, 1883.

To the SECRETARY to the GOVERNMENT of INDIA, Public Works Department, Simla.

SIR,—The Committee of the Chamber desire me to acknowledge your letter on the subject of the Nagpur-Bengal Railway, No. 729 R. C., dated 17th ultimo, with enclosures, which reached them on the 22nd idem, but which they had previously read in the public prints.

The Committee learn with satisfaction that the question of railway communication between the Central Provinces and Bengal is engaging the earnest attention of the Government, and the information afforded has been perused with great interest, though it is not a

full reply to the letters from the Chamber, dated 29th November 1881 and 9th March 1882.

The Committee feel strongly that an independent line of railway is required, and nothing that has been put forward, either in your letter, or in the letter from the Government of Bengal to the Government of India, a copy of which you have handed to the Committee, satisfies the Chamber that the traffic of the Central Provinces can be satisfactorily worked over the East Indian Railway, *via* Sitarampore.

The Committee understand, that the difficulties which the East Indian Railway has experienced for some years now, in meeting the export trade, have not wholly arisen from inability to discharge at Howrah with sufficient rapidity. It is in the recollection of many, that a few years ago only, grain was left rotting at stations on the East Indian line of railway through its inability to carry it; and yet notwithstanding such warning it has not been able to keep pace with its increase of traffic, and the dependence on it, of the Oude and Rohilkund Railway to carry its traffic to Calcutta has, it is understood, resulted in large quantities of Oude and Rohilkund grain rotting at the station in the present year, to the great loss of the native dealers, and the scandal of the Government connection.

After careful consideration, the Committee consider it very undesirable to allow the East Indian Railway the carriage into Howrah, or Calcutta of the whole of the traffic west of the river Hooghly. Already the Chairman of the East Indian Railway Company at Home has spoken as only one feeling that he represents a monopoly dare speak, and has shown that he is not prepared to facilitate trade at all in the manner necessary, and in the manner he would be forced to do, if his Company had a healthy competitor to combat with.

It is, then, the Committee consider for the good of the country that there should be an independent line of railway connecting Calcutta with the Central Provinces, and they fear that any attempt to satisfactorily meet the traffic of these provinces by a feeder line only to the East Indian Railway will prove a failure.

It is worthy of note that in the letters both from the Government of Bengal and the Government of India, though so much is made of the extra cost of the direct line to the Central Provinces through the new construction required, nothing is allowed for the perpetual saving in time, wear and tear, haulage, &c., by adopting a route 71 miles shorter than the other; that although there is a large coal-field at Henger, the fact is not mentioned, but much made of the want of the cheap coal obtainable at Sitarampore for enhancing the expenses of working the line.

As to the proposed railway bridge over the river Hooghly at Hooghly, the site, the Committee consider, is most unsuited for the trade from the west to Calcutta, as has been pointed out to the Government of Bengal, both by the Port Commissioners and by the Committee of this Chamber, and, even if the bridge be eventually constructed there, another will, it is considered, be absolutely necessary nearer the city, over which the traffic of the Central Provinces line could pass. The traffic such a bridge would command beyond that from the Central Provinces, would probably go far to meet the interest on capital.

In conclusion, the Committee would remark that they are not

favourably impressed with the manner in which the direct route has been considered and handled. They would have liked to have seen the desirability of such a new independent line (its desirability they suppose is undisputed) admitted, and a desire shown to adopt it if sufficient evidence in its favour were forthcoming. Had this been done and the reports of the officers given accordingly, they would probably have afforded all the testimony in its favour available; and the productiveness of the country between Calcutta and Midnapore, would have been fully considered, the capabilities of the country beyond, as regards minerals as well as grain, would have been put prominently forward, the importance of a line—presenting in some portions of its length the most convenient point for connection with the province of Orissa—would not have been lost sight of, and the facts that the storm that happened in 1874 did no very serious damage to the Midnapore canal, completed and opened in that year, and that the Damooda, Roopnarain, and Cossye rivers have been successfully controlled by the Irrigation Department for years would not have been passed over without comment.

If Government in ordering the survey of the route had said it was in favour of it, if it saw figures to justify it in going on with it, the Committee feel that much more would have been reported in favour of the direct line; and if enough could not have been said to justify the Government in sanctioning it, the public would at any rate have been satisfied, that on a fair examination the route was found incapable of giving a fair return on the capital required to open a line through it.

It is generally known, however, that Government favoured the other route; and the feeling is that the report submitted has been prepared more with the intention to support the Government view than to say all possible in favour of the direct line.

The Committee are decidedly of opinion that the railway requirements of the country will never be properly met until Government returns to the old guarantee system, and it doubts the wisdom of the policy of allowing short paying lines to be constructed by private enterprise, while the longer, more important and less remunerative ones are left to the Government. It is obvious that the Government in the end is a loser by such a system, and that a moderate guarantee on the whole, letting the bad go with the good, will, in the end, be best for Government. By guarantee alone will lines be constructed with that speed which is necessary. The present slow progress is lamentable.—I have, &c.,

JOHN COURE, Offg. Secretary.

LONDON, 1st October, 1883.

To the SECRETARY of the BENGAL CHAMBER of COMMERCE.

SIR,—My attention having been drawn to a letter from the Secretary to the Government of India, P. W. D., to the Chamber, dated Simla, 17th August last, and published in *The Pioneer*, criticising the statements put forward in my note of the 9th of March last, forwarded with my letter to your address dated the 27th idem, again

advocating the direct route, *via* Midnapore, for the Central Provinces Railway, as against the Loop Line, *via* Sectarampore, advocated by the E. I. R. Officials and the present advisers of the Government of India, I beg to submit the following remarks in reply to the main points raised in Colonel Trevor's letter for the consideration of the Chamber.

2. In reply to paragraph 2 wherein Mr. Leonard and others are quoted as advocates of the loop, I would beg to observe that I count Mr. Leonard amongst the many authorities I have consulted about this important matter since my arrival in this country, and that gentleman, with his experience of the manner in which all important loop lines in this country have ultimately been supplemented by the construction of chords (he quotes the case also of the E. I. R.), writes me "I also entirely take your view that it would be a serious blunder to throw the traffic of a great line over the end of another great line ; indeed, I am not sure that it would not be a blunder even to the E. I. R. to accept it."

3. I would also again beg to bring to prominent notice that, since Mr. Leonard and the other officers mentioned recorded their opinions in 1868, the Irrigation Department of the Government of Bengal has completed the Midnapore Canal, by which the whole of the water-ways of the district alluded to have been thoroughly and successfully controlled ; and responsible contractors have tendered for bridging the Damoodah, Roopnarian and Cossye at a total cost of Rs. 22,00,000.

4. I should also state that, owing to the manner in which efforts have been made to exaggerate the difficulties of dealing with the rivers alluded to, I, early last working season, again obtained, through the aid of the officers of the Irrigation Department, detail sections of them (they were first obtained in 1877); and also to enable contractors to tender for the works, further detail surveys and sections have been made by an Engineer having special experience of such works as are required.

5. I understand that most of the past and present district officers not only of the Burdwan District, but also of the Central Provinces, are now advocates of the direct line ; and in judging of the opinions recorded in 1868, it should, I would beg to observe, be remembered, that it was then, as it is now, thought by the E. I. R. authorities that the line should be made as a feeble branch of, and feeder to, that railway ; and I feel very confident that, if the case is now put to the other officers mentioned who are alive, as it has been to Mr. Leonard, with our latest experience of the working of the railways drawing traffic from the wheat-producing areas in India, and if their attention is also drawn to the enormous advantages which the Mahanuddy-Valley possesses for supplying almost unlimited quantities of that produce at less cost than any other known province in the world, they will also now concur with Mr. Leonard.

6. There is also the fact that the E. I. R. was congested with the traffic that came upon the line last busy season, and to such an extent that the consigners by the Oude and Rohilcund Railway have been urging for an independent outlet for that line to the sea face.

7. The block will be greater when the bridge over the Ganges

at Benares is finished, and greater still when the Bengal N. W. Railway is completed, and the heavy traffic from that system also thrown on to the E. I. R.

8. In reply to the concluding part of paragraph 3, wherein Colonel Trevor states that the Government of India prefers the Nothern route (the Loop) for famine purposes, I would beg to observe that famines are fortunately not constant in India, but the export of wheat from the Mahanuddy Valley would be ; and judging from our experience of famines during the last quarter of a century, I am very confident that figures and results would show that it would be far more advantageous for the Central Provinces Railway to bear the cost of carrying free over its system (and also over the E. I. R. if needs be) all food-grains required for famine purposes, rather than burthen its heavy traffic with the serious additional constant cost of working round the Loop.

9. I have, unfortunately, not been favoured with copies of the documents alluded to in paragraph 5 of the letter under notice, but I do not see why the information obtained from a rapid reconnaissance of part of the route only should be set against the close investigation and consideration that so many others besides your Chamber and myself have given this important matter during the last fifteen years. And to begin with I question the accuracy of the difference of the mileage between the loop and the direct line now put forward. This has been given by some at 120 miles, and by the E. I. R., who are not likely to overstate it, at ninety miles, and now as the result of the reconnaissance at seventy-one miles. I still make the difference to be fully ninety miles, and the discrepancy may partly have arisen from our considering it so important to make the mileage as short as possible, and select the best crossings for the Damoodah, Roopnarain, and Cossye rivers, that a line through the Midnapore District running some nine miles north of the Station of Midnapore is advocated.

10. I note that the cost of the direct line, *exclusive* of the large bridges, is put down at Rs. 1,03,000 per mile, whilst the loop through a more difficult country with very much more costly inland transport, and no water communication between Calcutta and the sites of the heavy bridge works is taken, *including* bridging, at Rs. 80,000 only. I am, however, for the reasons given in my note of March last, setting forth the enormous gains from working the direct line, quite prepared to accept the figures now arrived at as the result of the late reconnaissance (as to the cost of construction only) ; although to the best of my judgment there is not, for the reasons already stated, cause to have faith in them.

11. In reply to the concluding part of paragraph 6, I have before stated that, by taking the line to the north of the station at Midnapore and above the tidal influence, the length of the line is shortened instead of lengthened ; higher ground, better and well defined crossings of the rivers are also obtained.

12. In reply to paragraph 7, I admit that the results of working will only show what the local and through traffic will be by the respective routes. I, however, do not concur in thinking that the unbeaten heavy tree jungles, bordering much of the proposed route between Seetarampore and Dugni will produce more traffic than the fairly populous district of Midnapore, and what will become the

highway for much of the heavy pilgrim traffic to Pooree, and also the general traffic for the greater part of Orissa, and the large areas south of the Province of Bengal.

13. As to the competition by the canal. When I last made the trip to and from Midnapore in March last, with special facilities it took twenty-three hours each way to do it (about three miles per hour), and we had to change vessels five times, the whole journey being performed under the greatest discomfort. Such a mode of transit should not be considered sufficient, and can never compete with a railway.

14. A very short trip along the old Calcutta and Bombay Road to the west of Midnapore, which is one of the few old roads in Bengal, will satisfy any one that there is now more local traffic on the road than could be secured for ages even by a railway from the jungles between Seetarampore and Chyabassée.

15. The recent difficulties in carrying the E. I. R. traffic during April and May, in no way influenced my remarks made early in the previous March; but, now that a traffic of 5,000 tons a day has caused so much difficulty in working the whole of the line, mainly in consequence of the block at the Calcutta end, I maintain that when the bridge over the Ganges is completed at Benares, and the Bengal North Western Railway is at work, there will, under the most perfect arrangements, be more congestion than ever towards Calcutta; and it will be impossible to also work over the same rails the additional heavy traffic of the Central Provinces Railway; and that therefore to form a reliable estimate of the comparative total cost of the two routes, the great cost of laying an extra double line of rails between Calcutta and Seetarampore must be added, for the purposes of fair and useful comparison.

16. In forming an opinion of the carrying power of the E. I. R., it would appear that the professional advisers of the Government of India have accepted the statements of the E. I. R. officials, that their engines can haul 600 tons; but as a matter of fact, the published records of the Company show from actual working that the average dead weight of goods trains is 223 tons, and the freight carried only 172 tons (see published proceedings of the last meeting of the shareholders); and I submit that in forming an opinion of the carrying power of a railway, it is safer to be guided by actual results, than to assume that the maximum duty will be constantly got out of every one and everything.

17. Regarding the advantages of getting coal at Seetarampore, it has recently been brought to notice that the best of the Burrakur coal can be brought to the direct line by the original route for all coal to Calcutta, viz. by the Damoodah, giving down stream water carriage of only 95 miles; and this no doubt would be the cheapest route for the Raneegunge coal for the length of the line for which it would be required.

18. It would also be the cheapest route for the best of the steam coal from the Raneegunge coal-field to Calcutta, and thus relieve the E. I. R. of much of the heavy coal traffic at the most crowded end of the line, an object, I still urge, very much to be desired.

19. I fully admit that if the E. I. R. and the Government autho-

rities are right in believing that the Calcutta end of that railway without quadrupling will be equal to carrying all the Central Provinces traffic, in addition to the other traffic that will more naturally come upon it, then the actual cost of construction of the railway works only of the loop will be the lesser ; but it would appear from the letter now put forward, that the greater cost of providing twenty-five per cent. more rolling-stock required for the loop is still ignored ; and sufficient weight is not, I again submit, given to the great and constant additional cost of constantly working it, and all the loads carried on the average 440 instead of 350 miles. The great cost of maintaining the additional rolling-stock is also still ignored.

20. In judging of the carrying power of the E. I. R., I find from information placed at my disposal by the Great Northern Railway Company that when the tonnage, near and through London, on that railway, began to reach 4,000 tons per day, the necessity for quadrupling that line was shown. The E. I. R. has already reached over 5,000 tons per day, and will in time no doubt reach 8,000 tons, and surely the most sanguine officers of that Company, or of the Government, will not maintain that more than double the goods traffic can be worked over a double line of rails in India than in this country.

21. With regard to the cost of carrying, it appears to me unreasonable in any way compare the cost of carrying by the proposed independent new main line with the present cost on the E. I. R. First, as substantial a railway could now be made and equipped by the direct route as the E. I. R. for about half the capital outlay per mile. It could, at less cost, be provided with the heaviest steel rails, having sixteen times the life of the iron rails of the E. I. R., and be equipped with compound locomotives, showing, with other improvements, a saving of some 40 per cent. in fuel, and with rolling-stock of the most improved kind, showing a saving of fully one-third in dead weight.

22. It may interest the Chamber to know, that during my voyage home, and stay in this country, I have had special opportunities of learning from past and present officials having experience of the Central Provinces, and from the Records of the India Office, the areas under cultivation with wheat in those provinces, or capable of producing that crop, and the extent to which they can probably be easily increased ; and from the information thus obtained I learn that the Mahanuddy Valley is now capable of producing on an average 3,000 tons per day, and that it could be rendered easily capable of producing 13,000 tons, or more than double the quantity required in ten years to show the results I have already put forward.

23. The advantages I have now had of obtaining more reliable information on this all-important point have gone a long way towards proving that the proposed main line west of Sumbulpore instead of being located so as to serve, most advantageously, only the small area on the north bank of the Mahanuddy, should follow closely the route of the old Calcutta and Bombay road, right through the centre of the Valley.

24. This involves crossing the Mahanuddy below Sumbulpore ; but all the piers of the bridge could be got in dry on the rock bed ;

and the cost, I am advised, would not be much greater than in dealing in detail with the numerous tributaries on the north bank of the river. The great gain would be that some 27,000 square miles of wheat cultivation would be more easily drawn from, instead of only 6,000 miles. The main through-line would also be rendered more direct. The question of the exact route at this end of the proposed line should thus also, I am of opinion, have more attention than it has received, and a decision should not be arrived at from the actual cost of construction per mile only in the first instance.

25. With regard to its being urged that, because the site of the Railway Bridge over the Hooghly has unfortunately been fixed at Hooghly, the proposed new main line should make the necessary detour to be led over it, I cannot but hope that the opinion expressed by your President at your late meeting, and by the Joint Committee of the Chamber and the Port Trust Commissioners, strongly urging that, to meet the requirements of the Port a Railway Bridge must be placed near Calcutta, will have the necessary influence on Government, and cause it yet to reconsider this important matter. If not, I understand authorities in this country to be of opinion that another Bridge must be built nearer Calcutta that will meet the requirements of the Port; and the Bridge at Culnah must also be erected to connect the E. I. R. with the E. B. R. and B. C. R. systems. Under any circumstances, the additional shipping accommodation recommended by the Committee on the west bank of the river below Calcutta will give the necessary accommodation for the heavy exports from the direct line. It would even be better to run such traffic as may require it 23 miles up one side of the river and 23 miles down the other (particularly if no charge is to be made on one side, as it has been represented will be the case) rather than give the whole of the traffic a needless detour of 90 miles.

26. I regret very much that the want of the information set forth in the documents alluded to in paragraph 5 of Colonel Trevor's letter, prevents my rendering this reply as complete as I could desire; but I would beg to bring to the notice of the Chamber that further investigation and the special inquiries I have had opportunities of making with experts and authorities in this country, more than ever satisfy me that the Chamber has followed the right course in advocating the construction of the direct line. I may add further, that, if the question of route is left for the consideration of authorities in this country, with their greater experience in such matters, and more particularly in working, I have no doubt they will endorse Mr. Leonard's opinion as now recorded.—Yours faithfully,

F. PRESTAGE.

P.S.—Since the foregoing was sent to press, it has been brought to notice that during the late pressure on the E. I. R., that Company abruptly limited the receipt of goods from the Oude and Rohilcund Railway to some 800 tons per day, about one-fourth the quantity offering for despatch, thus further proving that the E. I. R. is already overpowered and seriously to the disadvantage of other important interests.

F. P.

BOMBAY CHAMBER OF COMMERCE, *4th December, 1883.*

To the SECRETARY to GOVERNMENT, Public Works Department (Railways), Bombay.

SIR,—The Committee of this Chamber have had under consideration the letter dated Simla, August 17, 1883, addressed by the Government of India to the Bengal Chamber of Commerce, and the correspondence therein referred to, on the question of railway communication between the Central Provinces and Bengal; and they desire me to address you on the subject.

The early construction of a line on the broad gauge connecting Nagpur with Calcutta, while it would be of great benefit to Bengal and the country generally, would be of the utmost importance to this Presidency, and particularly to the Port of Bombay. The Committee consider that the weight of argument is in favour of the Seetarampore route, and is sufficient to justify Government in taking up and carrying through that project first.

The Chamber, however, in the first place, cannot but express its regret that the Nagpur-Chattisgarh line, a length of about 149 miles, was made on the narrow gauge. In its memorial, dated 15th May 1878, to His Excellency the Right Honourable Lord Lytton, the Viceroy and Governor-General of India in Council (a copy of which is appended hereto), the Chamber set forth its reasons for protesting against the construction of this important extension on the narrow gauge, but, although the injury done to commerce from the breaking of bulk on through lines of communication—in the inconvenience, expense, delay, and damage to goods—can only be understood to the fullest extent by the mercantile community, who are therefore well qualified to form an opinion on the subject, the Chamber was never consulted as to its expediency in this instance, and was merely informed, in reply to its memorial, that, in compliance with the order of the Secretary of State in Council, it had been decided that the metre gauge should be adopted. Since the date of that memorial, the necessity of constructing the line from Nagpur to Bengal on the broad gauge has become much more apparent, and the Chamber begs most earnestly to express its hope that the Government of India will not permit the error which was made in constructing the Rajpootana-Malwa line from the Sabar-

mati to Agra and Delhi on the narrow gauge to be repeated in this case, and the permanent interests of the country to be partially sacrificed to the views entertained in some quarters that there would be a saving in the first cost of the line, if made on the narrow gauge, and therefore that it would be more expedient to construct it on the narrow than on the broad gauge.

The arguments in favour of through lines of communication being constructed on the broad gauge were again and again reiterated by the Chamber in its protests against the construction of the Rajpootana-Malwa line on the narrow gauge ; and the Committee need here only observe that (apart from the inconveniences of a break of gauge) experience has abundantly proved that although a line made on the narrow gauge may show a saving in the first cost, yet that this is insignificant when compared with the greater economy and efficiency in working broad gauge lines where the traffic is heavy. But in the case of the Nagpur-Bengal line no saving in the cost of construction could ever possibly compensate for the inconveniences of the break or breaks of gauge. The line will to a vast extent develop the agricultural and mineral resources of India in tracts hitherto unopened and almost unexplored. Its traffic will consist principally of wheat, which, being an article of large bulk, needs the greater carrying capacity of the broad gauge, and will find its way, according to the facility and cost of carriage and the state of the market, to one or other of the two great terminal ports, Calcutta or Bombay, for shipment to Europe. The exigencies of the Indian wheat export trade require the wheat to be hurried down to the port of shipment before the S. W. Monsoon sets in, so that it may arrive in England before the harvests in Europe are reaped ; and the delays and expense which are experienced at the transshipping station, where there is a break of gauge, and which in ordinary times are serious enough, may become ruinous to the trade by the desertion of labourers from epidemics, or for more profitable work in the districts, or by their refusal to work from sickness or other causes.

If an illustration were wanted in support of the views of the Chamber, it is to be found in the necessity, which is now everywhere recognised, of immediately doubling the G. I. P. broad gauge line from Bhosawul to Nagpur, the single line being totally unequal to the traffic. The districts east of Nagpur are no less productive, and when

aided with feeder roads and lines, which must ere long be made, the traffic will, there can be little doubt, require the full working power of a double broad gauge line.

With regard to the provinces which this line will traverse, the Committee believe that there is but one opinion that these are the richest wheat-producing districts in India, and that the line will be of the greatest importance, not only as a protective work against famine, but in enabling India to maintain her position in her competition with other countries for supplying the wheat required by England and the Continent of Europe. The imperial importance of a more rapid development of the wheat export trade, and its effect on the best interests of the people, cannot be over-estimated.

The Committee therefore trust that the line between Nagpur and Bengal will be constructed at an early date on the broad gauge, and that the present Nagpur-Chhattisgarh line, or any portion of it which may form part of the Nagpur-Bengal scheme, will be taken up and reconstructed on the broad gauge. They further desire me to express their hope that the views of the Chamber on this important subject may commend themselves to His Excellency the Governor in Council, and that he may be pleased to forward a copy of this letter to the Government of India, with an expression of his approval and support.—I have, &c.,

JAMES THORBURN, Chairman.
J. GORDON, Secretary.

BOMBAY CHAMBER OF COMMERCE, 15th May, 1878.

To His Excellency the Right Honorable LORD LYTTON, G.C.S.I.,
Viceroy and Governor-General of India in Council.

The Memorial of the Bombay Chamber of Commerce

RESPECTFULLY SHEWETH,—That your Memorialists, having reason to believe that the extension of the Railway from Nagpur to Raipore has been sanctioned, regret to learn that it is proposed that the line should be constructed on the narrow gauge, which would cause a break of gauge at Nagpur, and would, in other respects, impair the efficiency of the line as a means of safe and easy communication for the heavy local traffic of the districts, and for the through traffic when the line is extended to Calcutta.

The line will open up the greater part of Chhattisgarh, the most populous portion of the Central Provinces, in which all kinds of agricultural produce are raised in superabundant quantities, but in which development is at a stand-still for want of the means of trans-

port. The Commissioner of the Central Provinces, in his Report of the Trade and Resources of those Provinces for the year 1876-77, describes the present condition of Chhattisgarh as follows :—"A run of a few good seasons is as much dreaded by the agriculturist as a failure of the crops, for his produce is then a drug in the market, and he must sell at any price for money to pay the rent of his land." The development of production in the Central Provinces since 1875, when the people began to appreciate the advantages of railway communication, is still progressing, and few lines of railway could, from the great fertility of Chhattisgarh, be sanctioned in India, with better prospects of being financially successful than the Nagpur-Raipore line: nor could any line, when the quantity and bulky nature of its traffic are considered, require the greater capacity of the broad gauge more than this.

That in addition to the heavy traffic in grain and seeds which is certain to flow to this line from the surrounding districts, the line will eventually form a part of the main through line of communication between Calcutta and Bombay, for the G. I. P. Railway Company's system when extended from Nagpur to Calcutta will, while intersecting the richest provinces in India, shorten the distance between the Capital and this Port by perhaps not less than 200 miles.

That the narrow gauge system may be well adapted for the branches of trunk lines, and for local lines on which the traffic is inconsiderable; but your Memorialists respectfully urge that it would be impolitic to introduce a break of gauge into a line which will ultimately be a great trunk line, as it would necessitate the reconstruction of the line on the broad gauge, at great loss to the country, when the through communication is completed.

That your Memorialists presume that it has been decided to adopt the narrow gauge on this important line on the ground that there would be a considerable saving in the first outlay. Practically, however, the difference in first cost between the completion of the line on the broad and on the narrow gauge, with rolling-stock, shops, contingencies, &c., would not, your Memorialists believe, according to estimates, be greater than about £1,000 per mile, while experience has demonstrated that the cost of working a narrow gauge railway, when there is a heavy traffic, is much greater than the cost of working the broad gauge.

That a break of gauge in the heart of the producing districts, from which a very large portion of the G. I. P. Railway Company's grain and seeds traffic comes, will diminish the utility of the proposed line, and materially affect the well-being of the people, and the consequent prosperity of the imperial revenue; and that the interruption will obstruct the efficient transit of the through traffic when the line is extended to Calcutta.

For these reasons your Memorialists pray that, in the construction of the line from Nagpur to Raipore, the broad gauge be adopted.

And your Memorialists, as in duty bound, will ever pray.

*For, and on behalf of, the Members of the
Bombay Chamber of Commerce,*

W. LANG, Chairman.
J. GORDON, Secretary.

No. 2053 OF 1883.

PUBLIC WORKS DEPARTMENT (RAILWAY),
BOMBAY CASTLE, 20th December, 1883.

To the SECRETARY to the CHAMBER of COMMERCE, Bombay.

SIR,—I am directed to acknowledge the receipt of your letter, dated 4th December, on the subject of railway communication between the Central Provinces and Bengal, and to inform you that a copy was sent to the Secretary of State by the mail of the 14th instant, accompanied by a despatch in which H. E. the Governor in Council has urged that the line from Nagpur to Seetarampur should be taken in hand without further delay, and has expressed his entire concurrence with the Government of India and the Chamber as to the necessity for constructing it throughout on the 5' 6" gauge.—I have, &c.,

H. F. HANCOCK, Colonel, R.E.,
Joint-Secretary to Government.

No. 452 OF 1884.

P. W. DEPARTMENT (RAILWAY),
BOMBAY CASTLE, 6th March, 1884.

To the SECRETARY BOMBAY CHAMBER of COMMERCE.

SIR,—With reference to the letters from the Chamber of Commerce to the Secretary to Government, P. W. Department (Railway), dated respectively 21st November 1883, 4th December 1883, and 20th December 1883, I am directed by H. E. the Governor in Council to forward a copy of a despatch No. 1, Railway, dated 7th February 1884, received from the Right Hon'ble the Secretary of State for India in Council.—I have, &c.,

H. O. SELBY,
Under-Secretary to Government.

No. 1, RAILWAY.

INDIA OFFICE, 7th February, 1884.

To H. E. the Right Hon'ble the GOVERNOR in COUNCIL, Bombay.

SIR,—Your Excellency's Railway letters, marginally noted, transmitting representations which have been addressed to you by the Bombay Chamber of Commerce in support of the projected Nagpur-Bengal and Bhopal-Cawnpore Railways, and against the adoption of the metre gauge on the Jhansi-Manickpur Railway, together with the opinions of your Government thereon, have received my careful consideration in Council.

The views of the Chamber of Commerce, which are supported by

your Excellency's Government, as to the importance of the construction on the broad gauge of the projected Nagpur-Bengal and Bhopal-Cawnpore Railways will not fail to receive attention when it is determined to proceed with the lines in question, but, as your Excellency is aware, no steps will be taken to negotiate with any Company for carrying out those projects until the Select Committee of the House of Commons, which is to be appointed early in the ensuing session, has concluded its enquiries.

3. With regard to the question of gauge on the Jhansi-Manickpur Railway, I have to observe that the metre gauge was adopted after full consideration, and that I see no reason for departing from the decision arrived at. I transmit, for your Excellency's information, that portion of my despatch to the Government of India which dealt with this particular point :—

“With reference to the question of the gauge on which the line should be made, you state the reasons which have led to your conclusion that the 5' 6" gauge should be adopted. This, it appears, will involve a very large outlay in excess of the amount originally estimated as sufficient, and on the revised estimates an additional outlay of £2,70,000 over the sum needed for a metre gauge line would be requisite. Having in view the restricted means which must necessarily continue to be at the disposal of your Government for the prosecution of railways, and particularly for those not likely to be remunerative, and looking to the probable limited traffic that may be anticipated to pass over the line, I have not been satisfied that this additional expenditure would be justified.

“The urgent representations made by your Excellency's Government as to the necessity of an early extension of railways to districts which are not yet provided with them renders it imperative that every possible economy in first outlay should be secured, and in the present case the balance of argument appears to me to lead to the conclusion that the least costly description of line must be preferred. The well known precarious rainfall in the districts to be traversed, the relatively small population, only about 220 to the square mile, and the depressed condition of the agricultural classes, give almost certain indications that the traffic will be small in comparison with that of more favoured districts of the North-Western Provinces, while the traffic, even in Oudh from the agricultural wealth and population of which Bundelcund is very far removed, is so moderate as to fall altogether below the capacity of a metre gauge line.”

4. It does not follow that the main line from Bhopal to Jhansi and from thence to Gwalior and Cawnpore should likewise be constructed on the metre gauge. When the scheme of the projectors was before me, no other gauge than the 5' 6" was proposed.

5. I desire that replies may be made to the representations of the Bombay Chamber of Commerce in accordance with this despatch.—I have, &c.,

KIMBERLEY.

APPENDIX GG.

THE JHANSI-MANICKPORE RAILWAY.

BOMBAY CHAMBER OF COMMERCE, *8th December, 1883.*

To the SECRETARY TO GOVERNMENT, Public Works Department (Railways), Bombay.

SIR,—I am directed by the Committee of the Chamber of Commerce to address you on the subject of the Jhansi-Manickpore Railway.

This line will pass through the province of Bundelkund, which was described by the Famine Commission as a tract unprovided with railways, and at the same time difficult of access and liable to suffer from drought. Its length will be about 180 miles. It starts from Manickpore on the East Indian Railway, and will join at Jhansi, the main extension from Bhopal to Gwalior and Cawnpore, which the G. I. P. Railway Company have proposed to make, and the immediate construction of which on the broad gauge His Excellency the Governor in Council has been pleased to recommend.

The Famine Commission recommended that the construction of this line should be undertaken as soon as practicable as a famine work. The soil, however, in favourable seasons, yields luxuriant crops of cotton and cereals, and a large and remunerative local traffic may therefore be expected. As the line will be connected at one end with the East Indian broad gauge system, and at the other with the Bhopal extension, which must of necessity be a broad gauge railway, it will naturally, if there are no impediments to facility of carriage, share largely in the through traffic to Bombay, and as that traffic will principally consist of wheat, it is in the highest degree desirable that the line should be made on the broad gauge. No trade in British India has ever yet risen to the imperial importance of the wheat export trade, but the competition of India with

America, Russia, and other countries for the supply of the wheat required by England and the Continent of Europe is so keen, and the comparative disadvantages under which India labours are so great, that the inconveniences, expense, and risks of transshipment at each break of guage might effectually handicap her in her competitive struggle.

Yet it is reported—and the Committee have heard the report with extreme regret—that efforts are being made to prevail upon the Secretary of State to sanction the making of this line on the metre gauge. If his Lordship should thus be influenced in his decision, the gravest apprehensions are felt that he may in like manner be induced to desire that the main extension from Bhopal to Gwalior and Cawnpore should also be made on the metre gauge, which would deprive the port of Bombay of the benefits of a continuous broad gauge connection with Upper India, and impose a lasting injury on the trade of the Western Presidency. The Committee at present can only express their hope that the report has no foundation in fact, but should it prove to be true, they most earnestly but respectfully desire that their protest may be recorded against a decision, on a question so deeply affecting the commerce of India, formed on the representations of persons who are totally unacquainted with the exigencies of the trade, and not on the opinions of the Supreme Government or of the Local Governments and mercantile communities, who might reasonably be considered to be the most competent judges of the merits of the scheme and the requirements of the trade.

The Committee hope that the views of the Chamber in favour of the construction of the Jhansi-Manickpore line on the broad gauge may receive the approval and support of His Excellency the Governor in Council, and that he may be pleased to urge the same at his earliest convenience on the Government of India and the Secretary of State. They further desire me respectfully to request that His Excellency will be so good as to forward copies of this letter to the Government of India and the Secretary of State for India.—I have, &c.,

JAMES THORBURN, Chairman.
J. GORDON, Secretary.

No. 1 OF 1884.

PUBLIC WORK DEPARTMENT (RAILWAY),
BOMBAY CASTLE, *2nd January, 1884.*

To the SECRETARY CHAMBER OF COMMERCE.

SIR,—I am directed to acknowledge the receipt of your letter, dated 8th December, on the subject of the Jhansi-Manickpore Railway, and to inform you that the Governor in Council has submitted copies to Her Majesty's Secretary of State and to the Government of India, and has expressed the opinion that the saving of capital which would result from making this railway on the metre gauge would not, assuming that the Bhopal-Cawnpore line is to be constructed on the 5' 6" gauge, compensate for the drawback of having breaks of gauge at Jhansi and Manickpore.

2. His Excellency has at the same time repeated the opinion previously expressed that it would be a fatal mistake to construct the line from Bhopal to Cawnpore and Gwalior on any but the 5' 6" gauge.—I have, &c.,

H. F. HANCOCK, Colonel, R.E.,
Joint-Secretary to Government.

No. 452 OF 1884.

P. W. DEPARTMENT (RAILWAY),
BOMBAY CASTLE, *6th March, 1884.*

To the SECRETARY BOMBAY CHAMBER OF COMMERCE.

SIR,—With reference to the letters from the Chamber of Commerce to the Secretary to Government, P. W. Department (Railway), dated respectively 21st November 1883, 4th December 1883, and 20th December 1883, I am directed by H. E. the Governor in Council to forward a copy of a despatch No. 1, Railway, dated 7th February 1884, received from the Right Hon'ble the Secretary of State for India in Council.—I have, &c.,

H. O. SELBY,
Under-Secretary to Government.

No. 1, RAILWAY.

INDIA OFFICE, *7th February, 1884.*

To H. E. the Right Hon'ble the GOVERNOR in COUNCIL, Bombay.

SIR,—Your Excellency's Railway letters, marginally noted, transmitting representations which have been addressed to you by the Bombay Chamber of Commerce in support of the projected Nagpur-Bengal and Bhopal-Cawnpore Railways, and against the adoption of the metre gauge on the Jhansi-Manickpur Railway, together with the opinions of your Government thereon, have received my careful consideration in Council.

The views of the Chamber of Commerce, which are supported by

Nos. 22, 23, and 24, dated respectively 6th, 12th, and 21st December, 1883.

your Excellency's Government, as to the importance of the construction on the broad gauge of the projected Nagpur-Bengal and Bhopal-Cawnpore Railways will not fail to receive attention when it is determined to proceed with the lines in question, but, as your Excellency is aware, no steps will be taken to negotiate with any Company for carrying out those projects until the Select Committee of the House of Commons, which is to be appointed early in the ensuing session, has concluded its enquiries.

3. With regard to the question of gauge on the Jhansi-Manickpur Railway, I have to observe that the metre gauge was adopted after full consideration, and that I see no reason for departing from the decision arrived at. I transmit, for your Excellency's information, that portion of my despatch to the Government of India which dealt with this particular point :—

“With reference to the question of the gauge on which the line should be made, you state the reasons which have led to your conclusion that the 5' 6" gauge should be adopted. This, it appears, will involve a very large outlay in excess of the amount originally estimated as sufficient, and on the revised estimates an additional outlay of £2,70,000 over the sum needed for a metre gauge line would be requisite. Having in view the restricted means which must necessarily continue to be at the disposal of your Government for the prosecution of railways, and particularly for those not likely to be remunerative, and looking to the probable limited traffic that may be anticipated to pass over the line, I have not been satisfied that this additional expenditure would be justified.

“The urgent representations made by your Excellency's Government as to the necessity of an early extension of railways to districts which are not yet provided with them renders it imperative that every possible economy in first outlay should be secured, and in the present case the balance of argument appears to me to lead to the conclusion that the least costly description of line must be preferred. The well known precarious rainfall in the districts to be traversed, the relatively small population, only about 220 to the square mile, and the depressed condition of the agricultural classes, give almost certain indications that the traffic will be small in comparison with that of more favoured districts of the North-Western Provinces, while the traffic, even in Oudh from the agricultural wealth and population of which Bundelcund is very far removed, is so moderate as to fall altogether below the capacity of a metre gauge line.”

4. It does not follow that the main line from Bhopal to Jhansi and from thence to Gwalior and Cawnpore should likewise be constructed on the metre gauge. When the scheme of the projectors was before me, no other gauge than the 5' 6" was proposed.

5. I desire that replies may be made to the representations of the Bombay Chamber of Commerce in accordance with this despatch.—I have, &c.,

KIMBERLEY.

APPENDIX HH.

TRADE AND COMMERCE OF MACEDONIA.

No. 4319 of 1883.

REVENUE DEPARTMENT,
BOMBAY CASTLE, 8th June, 1883.

To the SECRETARY to the CHAMBER of COMMERCE, Bombay.

SIR,—I am directed to forward herewith, for the information of the Chamber of Commerce, a copy of the letter from the Government of India, No. 879, dated the 21st ultimo, and of its accompaniment, being an extract from a report on the trade and commerce of Macedonia by Her Majesty's Consul at Salonica regarding the production of opium in that province.—I have, &c.,

J. MONTEATH,
Acting Under-Secretary to Government.

No. 879.

GOVERNMENT OF INDIA.
DEPARTMENT OF FINANCE AND COMMERCE.

SIMLA, 21st May, 1883.

To the SECRETARY to the GOVERNMENT of BOMBAY.

SIR,—I am desired to forward for information the accompanying extract from a report on the trade and commerce of Macedonia by Her Majesty's Consul General at Salonica regarding the production of opium in that province.—I have, &c.,

R. LOGAN,
Offg. Under-Secretary to Govt. of India.

*Extract from the Trade Report of Salonica for the year
1880 and 1881.*

Opium and Poppy-seed.—There are few industries in European Turkey, certainly none in Macedonia, that have been so successfully introduced and prosecuted as the cultivation of the poppy.

It is only some seventeen years ago that the first attempt to grow this plant in this province was made by a Turkish farmer in Istip with a handful of poppy-seed which he had brought from Kara-Hissar in Asia Minor ; the experiment proved a complete success, and

was renewed on a larger scale in the following year, 1866, I believe, since which the production of opium has annually increased and flourished in Istip and the adjacent districts of Radovitz, Kotchana, Stroumnitza, Tikvish, and Kinprulu-Veles. The out-put of last year's crop was about 135,000 lbs. of opium, and 5,600,000 lbs. of poppy-seed. Most of the drug was exported to the United Kingdom at prices ranging from 12s. 6d. to 14s. per lb.

The Macedonian opium, especially that produced in the district of Istip, is very pure, and contains about 11 per cent. of morphia, while that of Smyrna contains scarcely 9 per cent. It is also considered equal to the Malatia produce.

Of the poppy-seed of last year's yield, some 4,000,000 lbs. were exported from Salonica, chiefly to Germany and France, at a cost of about 13s. per 100 lbs.

The Turkish Government, with a view to encourage the development of this industry, remits the tithes on opium and poppy-seed for one year, in the case of lands that are sown for the first time with poppy-seed, and distributes in the agricultural districts printed instructions on the process of cultivating the poppy and extracting and preparing the drug from its juice. Annex No. XV. is a translated copy of these instructions.

ANNEX No. XV.

If we take into consideration the fact that poppy-seed is capable of yielding 6 okes of opium and 10 kilos. of seed to every dunum of land sown; that an oke of opium realises 400 pias., and a kilogramme of poppy-seed 40 pias., and therefore that altogether a dunum of land sown with poppy-seed may be worth as much as 2,640 pias.; if at the same time we bear in mind that a dunum of land sown with wheat-seed yields at most 10 kilos. of wheat and 2,000 okes of straw, and that with wheat realizing 25 pias., the kilogramme, and with straw being only worth 30 pias. per 200 okes, the total possible value of a dunum of land sown with wheat is 280 pias., we see at once that in comparison with wheat and other similar products the cultivation of the opium poppy is a most lucrative industry.

Seeing, then, how productive of wealth the cultivation of the opium poppy has been to the agricultural population of the sandjak of Broussa, the following is a short treatise supplying information on this point.

The various species of Poppy-seed and the proper season for sowing.—Poppy-seed is also sometimes styled "Khashkash" seed. It is very small, and it is of two kinds. One is white, and the other is of a darker hue, both being contained within shells or pods, which are sometimes termed cocoons. These cocoons are globular in shape, and of the size of a Jerusalem artichoke, having on the upper side a roundish mark which is termed the "comb."

The darker-hued seed is of two species. The outer shells or cocoons of the first species are small, and may be distinguished by a row of small holes, through which, if great attention be not paid, as soon as the outer shells are fully matured and ready to receive the produce of the seed, the latter drops and is lost. The flowers of this first species are generally of a red or purple hue. So also are the

flowers of the second species, but the outer shells of the latter are larger and of an oval shape, and they have no holes in their combs.

The white poppy-seed is also of two kinds, of which though one is white the other is yellow. In other respects there is very little difference between these two kinds, both having large oval-shaped outer shells with no holes under their combs, the flower, like the seed, being white. The opium extracted from this species of poppy is more abundant and of a superior quality to that which is the produce of the first-named species.

Although in some localities the "Khaskash" or poppy-seed is sown, as a rule it is only utilised by yielding an oil which is extracted from it. From 100 okes (275 lbs.) of seed may be obtained a yield of 30 or 40 okes (82½ or 110 lbs.) of oil, which is of two kinds, of which one is obtained by first pounding the seed, then heating it and extracting the juice while the seed is still hot. This oil is used in Europe in the composition of water-colour paint and oil paint, and is also burnt in lamps. It is also used in the manufacture of glass shades.

The other kind of oil is obtained without heating the crushed seed, and having a pleasant taste is used in the preparation of food.

Arkara-Hissar Sahib ("Afion Kara Hissar").—The seed is first heated before the oil is extracted, which is then universally used by the inhabitants in the preparation of food.

The oil extracted from the yellow poppy-seed, like the opium so extracted, is of a superior quality to the others. In localities where there is no hoar frost in spring and autumn, poppy-seed is sown from the month of September up to March; but in places where there is hoar frost, the seed must without fail be sown in the month of September and in the spring after the chilly weather is passed. However, seeing that in most places there is hoar frost both in spring and autumn, and that in spring, even in the month of April, there is usually some hoar frost, and that after the month of April seed time is already passed, in this country the seed should be sown in September, or at latest in the beginning of October; if the seed be sown at the season mentioned, the yield both of opium and of poppy-seed is more plentiful than if that operation be performed when the weather is chilly.

Description of the kind of soil most suitable to the Poppy.—The poppy-seed must be sown in light, rich, and yielding soils. If it be sown in cold clayey soil or in damp localities, the yield will be small, and the opium of an inferior quality.

Ground which is to be sown with poppy-seed, of whatever kind it be (i.e., the seed), should be well manured, sheep's dung being of course preferable. Experience has proved that, if a field which has just yielded a crop of opium be immediately sown with wheat, the crop resulting from this last sowing will be remarkably good.

The method to be adopted in sowing and the necessary subsequent treatment.—The soil of a field which is to be sown with poppy-seed should be ploughed two or three times and well turned up. The seed should then be scattered about with the hand, just as flax-seed is. After this the soil must be thoroughly stirred up and mixed by a rake or a row of bushes bound on to the back of a harrow.

If 100 drachms (i.e., Turkish drachms) of poppy-seed be sown on

every dunum of land, or on such an extent of land as will take a kilogramme of wheat-seed, it is sufficient. As soon as ever the young poppy plants begin to appear above the surface of the soil and to bear three or four leaves, in those places where they are too close together they must be taken up and planted again in such a manner as to leave a space of a span between each plant. In order to remove any weeds that may make their appearance in these spaces the soil must be hoed once or twice. This use of the hoe must never be omitted; for if there be many weeds in the field they stunt the proper and healthy growth of the plants, and cause a considerable diminution in the amount of the crop. Moreover, if the seeds of such weeds remain in the soil, it becomes subsequently impossible to rid the field altogether of them.

The course of treatment to be observed at harvest time.—Opium being a substance which is extracted from the pods or outer shells described above, as soon as these pods become green in colour and have reached their full growth, the green hue changes to yellow. A few days before this change of colour takes place, there forms over the pods a very thin watery film of a light green hue, though somewhat indistinct in appearance. This film is called "cougak." If it be wiped away with the finger, its place remains quite visible. If at about this time the pod be squeezed between the thumb and forefinger, it becomes so far strengthened that it cannot be easily crushed. It is then that the juice which forms the opium must be gathered.

In order to gather the juice or paste, the first step is to take a knife, made especially for this purpose, being small and as sharp-pointed as the end of a penknife, and with it to cut a semi-circular line in the pod beginning from the middle and going round the edges, at the same time leaving a space of about a finger's breadth. Immediately this is done, there appears a white milk-like fluid of a bitter taste, and there forms. This fluid little by little increases in consistency, and its colour becomes darker and darker, until in 24 hours it becomes coffee coloured, and as thick as paste. This is opium. This must be scraped off with the edge of a somewhat large and blunt knife and put into a poppy leaf, and so on until as much as 20 or 30 drachms of opium have been collected on one leaf, the edges of which must be turned in so as to prevent it being spilled. If, while the opium is being collected, the film above described be mixed with it, it has a beneficial effect.

At Kara Hissar the work of cutting lines in the pods of the poppies is generally begun early in the afternoon, and continued until nightfall. As the opium must be collected 24 hours after the above operation has been concluded, the following day also, soon after twelve o'clock they begin, on the one hand to collect the opium from the pods which were cut the day before, and also to cut lines in other pods, which work occupies them until the evening. But should they come across pods which are not quite ripe, they leave them alone, and five or six days afterwards they again visit them, and after cutting lines in them collect their juice.

In order that the exact season for collecting the juice may not be missed, the whole work must be gone through and finished in five or ten days. Moreover, the proper time for marking the pods must be accurately ascertained; for if the pods be cut, say 10 days before or

after they are quite ripe, there is no yield of opium. As an instance of this, it may be mentioned that in the plain of Broussa the experiment was made. Although the plants had reached their full growth, the pods were marked or cut both before and after the exact time when the operation should have been performed, and consequently there was no yield of opium. Sometimes it happens that a dry wind begins to blow at the very time when the poppy pods should be cut and the atmosphere becomes chilly in consequence. During such weather the yield of opium is very small. The pods also should not be cut when it is raining, for the rain washes away and destroys the juice as fast as it exudes from the seams that have been cut for it.

After the opium crop has been gathered in, the pods change their previous hue of either green or yellow to rose colour; when this change takes place the poppy plants should be taken up by the roots one by one and collected into small bundles. Each bundle should then be bound by a young green withe, and then so placed upright in the ground that the roots of the plants be covered, in which position they should remain for a few days until the seed contained within the pods shall have become thoroughly matured and dry. Then the pods should be threshed with a stick until they break open, when the seed may be collected.

Another method is to sever the stem of the plant at the knot which is to be found close up to the pod, with the finger and thumb, and after collecting the ends so severed to spread them out to dry in some open place, and then to break them open by threshing, or else to pull them at pieces; and, after sifting the seed until it is quite free from extraneous matter, to collect it.

At Kara Hissar they purposely burn most of the pods and reduce them to ashes, a fluid extracted from which they use to bleach cotton, on the ground that it is more effective than the water strained off from ordinary ashes.

After extracting the oil from the poppy-seed, there remains a sediment technically called "kyusebe," on which buffalo, cows, and black kine generally are fed, on the ground that such diet increases the amount of milk and so of "caimak" (cream).

APPENDIX II.

INTRODUCTION OF EGYPTIAN COTTON INTO INDIA.

No. $\frac{S. R.}{769}$ of 1883.

CAMP BELGAUM, 20th June, 1883. ...

From ARTHUR CRAWFORD, Esq., Commissioner, S. D., to the SECRETARY of the CHAMBER of COMMERCE, Bombay.

SIR,—I shall be obliged by your informing me if any serious attempt on a large scale has ever been made to introduce Egyptian cotton into India, and if so, if you can favour me with any detailed information of the result or reference to any printed papers.

2. Through the kindness of Messrs. Graham and Co. and Messrs. Peel, Cassels and Co., I have been able to import $1\frac{1}{4}$ tons of selected Egyptian cotton seed which has arrived in apparently excellent order, and will be issued to well-to-do ryots to sow in the best black soil in the Dharwar District in plots of not less than 5 acres each. The sowing will be carefully watched in the first instance, and every care will be taken that the crop is carefully weeded and attended to. The kappas is to be brought to our factories to be ginned, and the seed is to be reissued from our factories in the following season.

3. There is seed sufficient for 400 acres ; and four prizes of Rs. 50 each are offered for four best 5-acre crops of Egyptian cotton.

4. The result of the experiment will be duly communicated to the Chamber and samples sent for inspection.

5. If the experiment should happily prove fairly successful, I shall next year import 2 tons of seed in addition to that obtained from the first crop.—I have, &c.,

ARTHUR CRAWFORD, Commissioner, S. D.

BOMBAY CHAMBER OF COMMERCE, 3rd July, 1883.

To ARTHUR CRAWFORD, Esq., Commissioner, S. D.

SIR,—In reply to your letter No. $\frac{S. R.}{769}$, dated the 20th ultimo, I am desired to inform you that in former years numerous experiments were made with Egyptian cotton in India, and with different results ; but the Committee are not aware that any serious attempt on a large scale has ever been made.

The experiments of planting Egyptian cotton in the Dharwar and

Belgaum Collectorate in 1860, the details of which will be found at page 73 of the Chamber's Report for the year 1859-60, do not appear to have been successful, the then Commissioner, Mr. Rose, having reported that that variety was unsuited to the country, and that no advantage would be derived from making any further experiment. On the other hand, an account of a very successful experiment with Egyptian cotton, made by Mr. W. M. Hearn in August 1861, will be found at pages 77 to 84 of the Chamber's Report for the year 1860-61. It will be observed that Mr. Hearn was satisfied that Egyptian cotton might be successfully raised during the monsoon in red soil in the Padshapoor and Beedee Talookas of the Belgaum Collectorate, and in many parts of Dharwar. The experiments made in Sind (see page 33 of the same Report) seem to have been complete failures. All these experiments, however, were on a small scale.

Great efforts were made in the years 1859 to 1860 and 1860 to 1861 to improve the cultivation of Indian cotton, and a full account of them will be found in the Reports of the Chamber for those years, which are sent herewith for your perusal, and the Committee will be glad if you will kindly return them when done with.—I have, &c.,

J. GORDON, Secretary.

APPENDIX JJ.

EXPORT TRADE IN MOWRA FLOWERS.

No. 5024 OF 1883.

POONA, 3rd July, 1883.

From the COMMISSIONER of CUSTOMS, Salt, Opium and Abkari, to the SECRETARY to the CHAMBER of COMMERCE, Bombay.

SIR,—I have the honour to request that you will be good enough, with the permission of the Chamber, to favour me with information, so far as may be possible, on the following points bearing on the foreign export trade in Mowra flowers :—

- 1st. The names of the European countries to which Mowra flowers are exported from Bombay.
- 2nd. The ordinary wholesale selling prices of Mowra flowers in Bombay.
- 3rd. Whether Mowra flowers produced in the districts of Thana and Kolaba are exported to foreign countries, and their quality and price as compared with the qualities and prices of Mowra flowers brought to Bombay from other places.
- 4th. Whether the Chamber sees reason to anticipate any material increase or decrease in the future demand for Mowra flowers for export.—I have, &c.,

C. B. PRITCHARD,
Commr. of Customs, Salt, Opium and Abkari.

BOMBAY CHAMBER OF COMMERCE, 18th July, 1883.

To the COMMISSIONER of CUSTOMS, Salt, Opium and Abkari.

SIR,—I have laid your letter of the 3rd instant before the Committee of the Chamber, and they direct me to send you the following information in answer to the queries contained in your letter :—

1. Mowra flowers are exported to a considerable extent only to Marseilles : other markets such as London, Liverpool and Havre have been tried, but apparently without satisfactory results.
2. The wholesale selling prices of Mowra flowers in Bombay range between Re. 1-12 and Rs. 2-12. The present price is Rs. 2-4 per cwt.
3. So far as the Committee are aware, Mowra flowers produced

in the districts of Thana and Kolaba are not exported to foreign countries, all being used locally for food or distilling purposes. As regards the quality produced in these districts and the price, they are about the same as those of the Guzerat flower ; whereas the flowers which come from Jabalpur are very fine indeed, although up to this time exporters have made no difference in the price they pay.

4. The whole of the Guzerat and Jubalpur flowers go to Marseilles, where alcohol is made from them, and judging from past events, the quantity exported will probably continue increasing, so long as the French law continues to allow these flowers being used in the distilleries. So large a quantity, during the current season, has been shipped to Marseilles, that the attention of the French Government was drawn to it, and a Bill was introduced to prohibit the use of Mowra flowers in the distilleries in France. While this Bill was in suspense, the demand entirely died away, and until it was decided that the Bill should not become law, all export ceased. The Bill was, however, withdrawn, and there is again a demand from the French distilleries. Whether there will be any material increase or decrease in this demand will, the Committee believe, depend upon the price at which the other articles for this manufacture can be obtained ; for instance, on the fig crop in Southern Europe for which Mowra flowers are used as a substitute in the distilleries of France.—I have, &c.,

J. GORDON, Secretary.

No. 5474 OF 1883.

POONA, 19th July, 1883.

From the COMMISSIONER of CUSTOMS, Salt, Opium and Abkari, to the SECRETARY to the CHAMBER of COMMERCE, Bombay.

SIR,—I have the honour to acknowledge receipt of your letter, dated the 18th instant, and to request that you will be good enough to convey to the Committee of the Chamber my thanks for the information with which they have favoured me concerning the export trade in Indian Mowra flowers.—I have, &c.,

C. B. PRITCHARD,
Commr. of Customs, Salt, Opium and Abkari.

APPENDIX KK.

GOVERNMENT OF INDIA'S PROPOSAL TO INTRODUCE A UNIFIED STAMP OF THE VALUE OF ONE ANNA FOR POSTAGE AND REVENUE PURPOSES.

No. 5867 OF 1883.

REVENUE DEPARTMENT,
BOMBAY CASTLE, *8th August*, 1883.

To the SECRETARY to the CHAMBER of COMMERCE, Bombay.

SIR,—In forwarding the accompanying copy of a letter from the Government of India, No. 2279, dated 26th ultimo, relative to a proposal to introduce a unified stamp of the value of one anna for postage and revenue purposes, I am directed to request you will be good enough to favour Government with a definite opinion of the Chamber of Commerce as to whether they would prefer to leave matters alone or to have a unified stamp accompanied by a prohibition of defacement of postage stamps.—I have, &c.,

J. MONTEATH,
Acting Under-Secretary to Government.

No. 2279.

GOVERNMENT OF INDIA.
DEPARTMENT OF FINANCE AND COMMERCE.
SEPARATE REVENUE, &c.
Stamps.

SIMLA, *26th July*, 1883.

To the SECRETARY to the GOVERNMENT of BOMBAY.

SIR,—By Financial Resolution No. 3481, dated 30th August 1882, the several Local Governments and Administrations and the Chambers of Commerce were requested to favour the Government of India with their views on a proposal to introduce a unified stamp of the value of one anna for postage and revenue purposes. Before taking any final steps on this proposal, His Excellency the Governor-General in Council considered it desirable to ascertain whether, in the opinion of the European and Native community, it would be more generally acceptable that the public should have the facility afforded by the use of postage stamps instead of the one anna revenue stamp, and at the same time incur whatever risks the individual runs, in the way of

fraud, by leaving the stamps attached to letters without any defacement, or whether the public regard the present practice of defacing postage stamps as so essential to their own interests as to make them willing to forego the advantages afforded by using a unified stamp for postage and revenue purposes, in order that the present practice of defacing postage stamps might be retained.

2. The following is a summary of the replies received :—

- (a) The Bengal Chamber of Commerce is of opinion that, 'on the whole, the community in the Presidency towns and large mofussil stations will be generally inclined to accept the proposed change with favour; but at the same time the Chamber observes that it will be long before people in the rural districts can become aware of the prohibition of the practice of defacing stamps on covers, except by the practical experience of having their defaced stamps treated as unstamped, and therefore liable to double postage; and loss, distrust of the Post Office, and possibly loss of revenue may temporarily follow.
- (b) The Madras Chamber of Commerce is of opinion that the proposed change would be a great convenience to the public, and that its obvious advantages would counter-balance the risks of a fraudulent re-use of stamps. The Chamber is of opinion that there is as much risk of a receipt stamp once used being affixed to a second receipt as of a receipt stamp once used being removed for use as a postage stamp; and as Government has accepted the former risk without unsatisfactory results, it is believed that the extended use of postage stamps may also be adopted without much risk of the fraudulent re-use of such stamps.
- (c) The Chief Commissioner of Coorg submits a letter from the Commissioner stating that the proposed change will be regarded as a boon by the public, particularly in the matter of receipts, as almost all persons keep a small supply of postage stamps of which they can avail themselves everywhere. The Chief Commissioner observes that the universal practice adopted in India by Europeans, of sending letters to be posted by messengers who cannot always be relied on, would seem to render it inadvisable to prohibit the present practice of defacing postage stamps.
- (d) The Government of Madras states that there is a general consensus of opinion in favour of the proposed change, but against the introduction of any measure which would endanger the security of ordinary post letters. The Right Hon'ble the Governor in Council is disposed to favour an expedient suggested by the Superintendent of Stamps, viz., that when affixed to documents all stamps should be required to be punched with a hole. This would afford sufficient protection against fraud, for assuming that a person likely to put them to a fraudulent use could get possession of old stamps, the difficulty of patching them up so as to

deceive the postal officers would prevent its being worth while to make the attempt.

- (e) The Board of Revenue, Madras, are of opinion that the use of a unified stamp would be productive of great public convenience, but that it would be unsafe to introduce any measure which would operate to endanger the security of ordinary post letters by preventing postage stamps, used as such, from being cancelled before issue by the sender. The Board suggest, as a means of preventing the difficulty, the issue of a stamp with the words "postage" and "revenue" printed across the upper and lower portion of the stamp. The stamp should, when used for revenue purposes, be defaced by drawing the pen through the word "revenue"; when used for postal purposes, the stamps might either be used without defacement or be defaced by drawing the pen through the word "postage."
- (f) The Chief Commissioner, Ajmere-Merwara, concurs with the Commissioner of Ajmere in thinking that the best method of defacing stamps used for revenue purposes so as to prevent their subsequent use as postage stamps would be to perforate them.
- (g) The Government of Bengal forwards copies of letters from several public Associations, and observes that they are unanimously in favour of the use of the unified stamp. The Lieutenant-Governor concurs in the opinion expressed by the Calcutta Trades' Association that the practice of defacing postage stamps is not of such importance as to render its abandonment difficult, and that the considerations attaching to it should not be allowed to interfere with the carrying out of the contemplated reform. The Lieutenant-Governor further recommends for adoption a proposal made by the Calcutta Trades' Association regarding the grant of certificates of posting.

The Committee of the British Indian Association have no hesitation in saying that the proposal will greatly conduce to public convenience. The Committee consider the only question to be decided is, whether the prohibition of the practice of defacing postage stamps will cause loss to the public. The bulk of the people post their letters by their servants or by third persons; and if the stamps be not defaced, they may be removed by dishonest persons, and the addressors and addressees will both be sufferers. The Committee confess that they cannot think of any device by which this loss can be prevented. Having regard to all circumstances connected with the question, the Committee are of opinion that the balance of convenience from the use of unified stamps is in favour of the public, and they would therefore recommend the introduction of the proposed change as an experiment with such precautions as may be necessary to provide against loss and inconvenience.

The Committee of the Calcutta Trades' Association consider that the proposed measure, if carried out, would undoubtedly conduce very largely to the convenience of the public. The only difficulty which appears to stand in the way of the carrying out of the measure is the possibility of stamps once used in payment of stamp duties being

used a second time as postage stamps—a danger which arises out of the existing practice by which senders of letters deface the stamps put upon their letters. The Committee are of opinion that the practice of defacing postage stamps is not of such importance as to render its abandonment difficult, and that the fears entertained as to the likelihood of stamps being removed from letters if left undefaced are greatly exaggerated. The Postal Department could render the removal of stamps more difficult by the use of a more adhesive mucilage than is now employed. It is suggested that the system which obtains in the Postal Department of granting certificates of posting should be modified in respect of the charge for such certificates. The present charge is half an anna for every article tendered, but the Committee think it would be advisable to fix a charge of half an anna for letters not exceeding ten in number. The Committee think that the adoption of this suggestion would meet the objection to the prohibition of the practice of defacing postage stamps.

- (h) The Government of the North-Western Provinces and Oudh remarks that the only difficulty in carrying out this proposal seems to be the necessity for prohibiting the practice of defacing postage stamps affixed to letters. The Lieutenant-Governor has no doubt that, in the first instance at least, such a prohibition might cause considerable annoyance to the public which has been accustomed to deface postage stamps; and it might be questioned whether this would not for a time counterbalance the increase of revenue anticipated from the use of the unified stamp. On the whole, however, the Lieutenant-Governor is inclined to agree in the views expressed by the junior member of the Board of Revenue, that the inconvenience would after a time cease to be regarded as a hardship, while the advantages offered by the unified stamp are obvious. It is therefore recommended that the proposal be carried out.
- (i) The Chief Commissioner of the Central Provinces states that he has ascertained that the use of embossed envelopes is largely on the increase; that it is certain that the use of these envelopes is a much more effectual safeguard against fraud than the defacement of adhesive stamps; and that the only result of prohibiting the defacement of postage stamps when attached to letters would be the more general use of embossed envelopes. Having regard to the manifest desire of the community to see the introduction of the unified stamp as likely to prove of the utmost convenience, the Chief Commissioner is of opinion that the general reluctance to abandon the practice of defacing postage stamps should be disregarded, partly because no real hardship would be inflicted on the public by the proposed prohibition which they would soon understand, and partly because the reluctance arises simply out of the usual objection to innovations of every kind. He therefore recommends that the unified stamp may be introduced.
- (j) The Chief Commissioner of Assam reports that public opinion is in favour of the proposed change, and remarks

that the habit of defacing postage stamps is not universal, and that the defacement of postage stamps by lines and of receipt stamps by initials and dates will obviate the suspected danger of fraud.

- (k) The Resident at Hyderabad forwards copy of a report by the Commissioner of Berar stating that the general opinion of officers in that Province is in favour of the proposed change. The Resident observes that there has not been time to ascertain from the postal authorities what the practice of natives really is as regards the defacing of postage stamps, and therefore he is unable to express an opinion with confidence. On the whole, however, he is inclined to think that the prohibition of the practice of defacing postage stamps would not be felt as an inconvenience.
- (l) The Government of the Punjab states that replies to enquiries made show that, with few exceptions, the public would hail the introduction of the unified stamp as a great convenience, and would be willing to forego the advantage of defacing postage stamps in order to make its introduction practicable. The Lieutenant-Governor has no hesitation in recommending the adoption of the measure.
- (m) The Chief Commissioner of British Burma states that the balance of opinion is in favour of the proposed change, and is of opinion that the defacement of postage stamps should be forbidden.
- (n) The Post Master General of Bombay submits a statement showing that in Bombay, about one-third of the letters posted daily have the postage labels defaced by the persons posting them, whereas the number of letters of which the postage labels are defaced amounts to only 18 per cent. of the total number of letters posted at Poona, and to 7 per cent. only of those posted at Belgaum. The conclusions which, in the opinion of the Post Master General, these figures seem to justify are that the practice of defacing postage labels is not so general as might have been expected, and that there is a very marked difference between the practice in this respect of a business community which is largely European as in Bombay, and of an ordinary native community at an up-country station. Both these conclusions, however, the Post Master General remarks, have to be considered in connection with the fact that ordinary correspondence between natives is almost entirely carried on by means of embossed envelopes and post-cards. The proportion of these envelopes to the total number of letters posted on any given day at Belgaum, for instance, would be not less than two-thirds of the entire number of letters posted. The Post Master General points out that as there is no object in defacing embossed stamps and post-cards, very large deductions must be made before conclusions as to the practice of the public in defacing postage labels are founded on the

statements submitted by him. The Post Master General is, however, of opinion that it may be safely accepted that the practice of defacing postage labels is very largely in vogue among members of the European community, and may be said to be universal with the business houses and firms in Bombay. He concludes with the remark that "the balance of opinion is in favour of retaining the practice of defacing stamps."

- (o) The Bombay Chamber of Commerce observes that the proposed change would be very advantageous, and that in many cases a great saving would result to the public from their having to keep a stock of only one kind instead of two kinds of stamps as at present. On the other hand, many members of the mercantile community object to being deprived of the privilege of defacing stamps on letters before they are posted, on the ground that the ordinary messengers employed to post letters in India cannot be trusted ; and if the public were deprived of the privilege of defacing stamps on letters, the mercantile community would be put to considerably greater expense in the employment of a more trustworthy agency for posting letters. It is extremely difficult to say whether the mercantile community generally would prefer to allow matters to remain as they are at present or to have a unified stamp, the privilege of defacing stamps on letters before posting being taken away. But the difficulty of providing some form of defacement for receipt stamps might, the Chamber suggests, be met by directing that receipt stamps on being used shall always be defaced by having the date distinctly written on them ; and then it will be quite easy for the Post Office to distinguish between stamps with a date written across the face and stamps which are merely defaced as postage stamps generally are at present, by the drawing of one or two lines across them, or by writing or printing on the stamps the name of the firm sending the letter.
- (p) The Bombay Trades' Association is of opinion that the proposed change would certainly prove a great convenience to the public generally, while no loss would result to Government, provided no change were made in the present practice of defacing postage stamps. The Association submit that if the practice of defacing stamps were prohibited, it would lead to wholesale thefts of stamps by servants, and much inconvenience from miscarriage of letters. On the other hand, the Association think that the re-use of stamps which had once been used for receipts could never be an extensive evil ; and if stamps when used either for receipts or postage were ordered to be defaced with the pen or in any other way, their use a second time would be so limited an evil that no rigid precaution would be called for. Under these circumstances, the Association submit that the alternative of risk in the way of fraud by leaving the stamps on letters without defacement should not be made

conditional to the acceptance by the public of the introduction of the proposed reform ; but that the advantage offered by using postage stamps in the place of revenue stamps might easily be conceded when very trifling loss is likely to accrue to Government. But if a precautionary measure be considered necessary in the interests of Government, it may be provided that postage stamps when used for receipts shall be defaced after affixing by cutting out a small portion from the centre.

3. It will thus be seen that the general opinion is in favour of a unified stamp, and that the majority of the public are willing to forego the privilege of defacing the stamps before affixing them in payment of postage. But it also appears that this privilege is still valued by certain classes of the community. Statistics collected in September last show that out of 100 letters it will be found that only 4·42 addressed in English have the stamps defaced, while only 1·84 addressed in the vernacular have the stamps defaced, the stamps in 93·74 being undefaced.

It is therefore evident that, taking all India together, a very large proportion of letters is posted without having the stamps defaced ; moreover, the defacement of a stamp is not in itself a thorough safeguard against fraud, and the number of embossed envelopes now used is very large. Various means have been suggested by which the present practice of defacing postage stamps may be continued should the introduction of a unified stamp be decided on, but on full consideration they do not appear to the Government of India to be practicable. Under these circumstances, the only alternative is either to leave matters as they are or to prohibit the defacement of postage stamps.

4. Although the balance of opinion appears to be decidedly in favour of the introduction of a unified stamp, the Government of India is unwilling, without further consultation, to take steps in a matter of this sort to which so important a community as that of Bombay entertains objections. I am therefore directed to request that, after consulting with the Chamber of Commerce and the Trades' Association, and furnishing them with a copy of this letter, the Government of Bombay will favour the Government of India with a definite opinion on the following point, namely, whether the Bombay Government would prefer to leave matters alone, or to have a unified stamp accompanied with a prohibition of defacement of postage stamps. The Government of India is willing that a long notice of the prohibition of defacement should be given, and that in the first instance the prohibition should not be rigorously worked.—I have, &c.,

R. LOGAN,
Under-Secretary to the Government of India.

BOMBAY CHAMBER OF COMMERCE, 1st September, 1883.

To the UNDER-SECRETARY to GOVERNMENT, Revenue Department,
Bombay.

SIR,—I have the honour to acknowledge the receipt of your letter No. 5867, of the 8th ultimo, enclosing copy of a letter from the Gov-

ernment of India, No. 2279, dated 26th July, relative to a proposal to introduce a unified stamp of the value of one anna for postage and revenue purposes, and requesting that Government may be favoured with a definite opinion of the Chamber of Commerce as to whether they would prefer to leave matters alone or to have a unified stamp accompanied with a prohibition of defacement of postage stamps.

In reply, I am directed to state that as the convenience of having one stamp instead of two is so apparent, and the percentage of letters which have their stamps defaced appears to be so small, the Committee of the Chamber prefer to have a unified stamp accompanied with a prohibition of defacement of postage stamps.

The Committee presume that it will still be permissible to deface all other stamps except those of one anna or half an anna, when two of these are allowed to be used to denote the one anna stamp duty as appears to be contemplated in para. 9 of the proposal of the Government of India, dated 30th August, 1882.—I have, &c.,

J. GORDON, Secretary



APPENDIX LL.

SAILING SHIP BILL OF LADING HOMEWARDS.

SHIPOWNERS' ASSOCIATION, LIVERPOOL, *25th June, 1883.*

M. MOWAT, Esq., care of Messrs. Ritchie, Steuart & Co., Bombay.

DEAR SIR,—We are directed by the Chairman of this Association, Mr. Donald Kennedy (who had the pleasure of sitting with you on the Chamber of Commerce here), to communicate with you with reference to the introduction, at the Port of Bombay, of the new form of Bill of Lading Homewards for the Eastern Trade, which was some time ago agreed upon between a Committee of merchants and shipowners in London.

The Bill of Lading has been in force at Calcutta since the 1st July 1881.

On the 22nd December 1881, by direction of our Committee, we sent a copy of the Bill of Lading to the Chamber of Commerce at Bombay, with the proposal that it should be used for all sailing ships entered outwards to the United Kingdom on and after the 1st March 1882.

We have received no reply to this communication, nor to further letters which we have addressed to the Bombay Chamber of Commerce on the same subject,

We are directed to ask you whether you will be good enough to see that the matter is taken up by the Chamber of Commerce at Bombay, and also to use your influence in securing the adoption at Bombay of the Bill of Lading in question.

For reference we send you a form of the Bill of Lading, together with the indorsement which was written on a copy and signed by the representatives of the merchants and shipowners who formed the joint Committee in London.—We are, &c.,

FIELD AND WEIGHTMAN, Secretaries.

ENDORSEMENT.

LONDON, *11th April, 1881.*

This Bill of Lading has been agreed upon in London by a Committee of shipowners and merchants appointed by the General Shipowners' Society of London, and the Bengal Chamber of Commerce, Calcutta, as a Sailing Ship Bill of Lading from Calcutta to United

Kingdom, and to be used for all sailing ships entered outwards at Calcutta for the United Kingdom as and after 1st July, 1881.

It is further agreed that clauses may be inserted in writing, or stamped upon the document, in addition to the printed matter, if in pursuance of any special contract or agreement between the merchant and the ship, and that any of the further exceptions, heat, leakage, breakage, sweat, or decay may be inserted, but only in Bills of Lading for produce to which the exceptions proposed to be inserted are reasonably applicable.

The Bengal Chamber of Commerce is authorised to take such steps as it may see fit to superintend, so long as it remains in use, the printing and publication of this Bill of Lading.

F. W. HEILGERS,
Chairman of Merchants' Committee.

JOHN CORRY,
Chairman of Shipowners' Committee.

SAILING SHIP BILL OF LADING—CALCUTTA TO UNITED KINGDOM.

If quality marks are used, they are to be of the same size as the leading marks and contiguous thereto; and if such quality marks are inserted in the Shipping Notes, and the goods are accepted by the Mate, Bills of Lading in conformity therewith shall be signed by the Captain, and the Ship shall be responsible for the correct delivery of the goods.

Shipped in good order and condition by

on board the Ship
voyage
and bound for

whereof is Master for this present
lying in the Port of

being marked and numbered as per margin,
and to be delivered in the like good order and condition at the aforesaid Port of

(The Act of God; the Queen's enemies; loss or damage from fire on board, in hulk or craft, or on shore; any act, neglect, or default whatsoever of Pilots, Master, or Crew in the navigation of the Ship in the ordinary course of the voyage; and all and every the dangers and accidents of the seas and rivers, and of navigation of whatever nature or kind, excepted.)

unto
or to his or their Assigns. Freight to be paid for the said goods at the rate of

without discount but otherwise subject to the customary mode of payment. Average as accustomed. In the event of claim for short delivery, price to be the market price of the day at port of discharge on the day of the ship's reporting at the Custom House, less charges and brokerage.

Weight, contents, and value unknown.

IN WITNESS whereof the Master or Agent of the said Ship has signed

Bills of
Lading, exclusive of the Master's copy, all of this tenor and date, one of which being accomplished, the others to stand void.

Dated at Calcutta,

BOMBAY CHAMBER OF COMMERCE, 7th August, 1883.

H. W. I. WOOD, Esq., Secretary Bengal Chamber of Commerce.

DEAR SIR,—Communications have recently been received by this Chamber from the Shipowners' Association of Liverpool requesting the Chamber to use its influence in securing the adoption, at Bombay, of the Bill of Lading headed "Sailing Ship Bill of Lading, Calcutta to United Kingdom," which has been in force at your Port since the 1st July 1881.

The Committee, before deciding as to the course of action which they may take in this matter, would be glad if you would kindly inform them if the Bill of Lading, in question, has been generally adopted in Calcutta, and if it has been found to answer? They would also be glad if you would furnish them with a few copies of it for circulation amongst the members of this Chamber.—I have, &c.,

J. GORDON, Secretary.

BENGAL CHAMBER OF COMMERCE,
CALCUTTA, 22nd August, 1883.

To J. GORDON, Esq., Secretary to the Chamber of Commerce, Bombay.

DEAR SIR,—I duly received your letter, of the 7th instant, on the subject of the Bill of Lading known here as the "*Sailing Ship Bill of Lading—Calcutta to United Kingdom.*"

In reply, I have the pleasure to inform you that the said Bill of Lading has been generally adopted, and has been found fairly satisfactory.

I enclose, as requested, a few blank forms of the Bill*, and may mention that the history of its introduction into general use here is to be found at pages 203 to 236 of this Chamber's Report for the half-year ended 30th April, 1881, copy of which was forwarded to you as usual.—I am, &c.,

JOHN COURE, Officiating Secretary.

BOMBAY CHAMBER OF COMMERCE, 7th December, 1883.

Messrs. FIELD and WEIGHTMAN, Secretaries, Shipowners' Association, Liverpool.

DEAR SIRS,—Mr. Mowat, of the firm of Messrs. Ritchie, Stuart & Co., handed to the Chamber of Commerce your letter to him, dated 25th June last, regarding the new form of Bill of Lading Homewards for the Eastern Trade, which was agreed upon between a Committee of merchants and shipowners in London, and which has been generally adopted in Calcutta. The Committee, on receiving this letter from Mr. Mowat, circulated it amongst the members of the Chamber for their opinion. A majority of the members is in favour of retaining the

* See page 619.

form which is now in use. The exports from Bombay by sailing ships are now so insignificant that no practical benefit can, they think, accrue from the adoption of an amended form of Bill of Lading, the more so as it has not been the cause of any dissatisfaction. In Calcutta it is totally different, as the Cape route still attracts a large portion of the trade.—I have, &c.,

J. GORDON, Secretary.

SHIPOWNERS' ASSOCIATION, LIVERPOOL, *9th January, 1884.*

J. GORDON, Esq., Secretary Chamber of Commerce, Bombay.

DEAR SIR,—We duly received your letter of the 7th December, which has been laid before the Committee of this Association.—Yours truly,

FIELD AND WEIGHTMAN, Secretaries.

APPENDIX MM.

STOCK NOTES.

No. 3305 OF 1883.

FINANCIAL DEPARTMENT,

BOMBAY CASTLE, *11th September, 1883.*

To the SECRETARY CHAMBER OF COMMERCE, Bombay.

SIR,—I am directed to forward herewith 25 copies of the Government of India's Resolution, in the Department of Finance and Commerce, No. 2599, dated the 10th ultimo, on the subject of the means to be adopted for encouraging investments in Stock Notes, and to request that you will be so good as to move the Chamber of Commerce to favour Government with their views, after consulting the principal local Banks, on the several points discussed in the Resolution.—I have, &c.,

J. MONTEATH,

Acting Under-Secretary to Government.

No. 3003.

FINANCIAL DEPARTMENT,

BOMBAY CASTLE, *15th August, 1883.*

The following Notification by the Government of India is republished:—

DEPARTMENT OF FINANCE AND COMMERCE,

SIMLA, *10th August, 1883.*

The following Resolution is published for general information:—

No. 2599.

RESOLUTION—By the Government of India, Department of Finance and Commerce.

In the Financial Statement for 1882-83 (paragraphs 258-264) it was stated that the question of whether it would not be possible to devise some means for borrowing from *bona-fide* local investors the amount required annually for Productive Public Works had far long occupied the attention of Government. Conflicting opinions, both official and non-official, had at various times been expressed as to the feasibility of adopting any such project. The Government was of opinion that

the only satisfactory way of solving the question was to bring it to the test of actual experiment. Stock Notes were, therefore, issued under conditions which were set forth in the Government Resolution of March 8th, 1882. Up to the present time the sale of these notes has not been large; the people have not, as a rule, become familiar with them; they complain of the difficulty which they must experience in attempting to recover the value of lost notes; there is no ready sale when a holder of stock notes wishes to dispose of them; and they can only be got rid of at a sacrifice.

2. Since the introduction of the scheme, the Governor-General in Council has had under consideration, from time to time, various objections to, and suggestions regarding, stock notes (see Financial Statement for 1883-84, paragraph 231). Some of these objections and suggestions of minor importance have already been dealt with. There are still several matters which require consideration.

3. One of the chief objections to stock notes is that the holder of them can only find a purchaser at a discount when he wishes to sell. This is admittedly a great drawback to their popularity, and it becomes necessary to consider whether anything can be done to enable the holder to obtain the full value of a stock note promptly when he requires money.

4. It has been suggested that stock notes should be receivable in payment of Government demands. This suggestion cannot, however, be adopted, as Government could not run the risk of having a large portion of the total issue of stock notes returned upon its hands at any moment, the cash balance of the public Treasury being proportionately reduced. If this course were adopted, stock notes would not essentially differ from Savings Banks deposits.

5. It is possible that in time stock notes will be freely bought and sold in the interior of the country, but for the present it has been suggested that a market might be created by authorising the sale of stock notes to the public at the Presidency towns, and by making the interest payable there. Capitalists might then find it worth their while to deal in them, and in time of pressure the holder of a stock note would find a ready market for them at a trifling discount; and although it may be said that stock notes were intended for the people, and not for speculators, the course suggested would not impede in any way their circulation among the people, but would probably have a contrary effect.

6. If a market for stock notes were created at the Presidency towns, it is possible that there might be interference with the ordinary promissory notes of Government. Stock notes, however, are at a considerable disadvantage as compared with promissory notes. The interest coupons cannot be enfaced for payment in England, the denominations of the notes are small, and the interest is payable only once a year. It is believed by some that these disadvantages are sufficient to prevent the competition of stock notes with the ordinary 4 per cent. stock of Government.

7. If, however, by authorising the sale of stock notes in Presidency towns a market should be established, in anything approaching the

same sense in which there is a market for Government promissory notes, it is possible that there would be interference with the ordinary stock of Government ; there are many purposes of temporary investment which would then be served by stock notes equally as well as by promissory notes, and so long as Government offered to persons entrusted with the sale of stock notes a discount of one per cent., part at least of the demand for promissory notes would be removed. Any market thus established must necessarily be a market for buyers as well as for sellers ; and as the selling price must always necessarily be below the Treasury price, the inevitable result would be that there would be fewer demands upon the public treasuries than if no such market were in existence. It would follow from these arguments that the creation of a market for stock notes at the Presidency towns might not be desirable in the interest of Government Loans or of the stock note scheme itself.

8. It has been also suggested that a limit might be placed on the total issue of stock notes from year to year. This suggestion is of doubtful value.

9. Another objection to stock notes is that the interest payable on a note of one Circle is not payable in another Circle ; the Governor-General in Council is of opinion that this objection can be easily overcome by ruling that on payment of a trifling fee the holder of a note of Circle A may obtain a note of Circle B in exchange on presenting the A Circle note at any Treasury in Circle B.

10. It has also been objected that stock notes are liable to be lost or destroyed, and that their value can then be obtained only with great difficulty, and after a long time has elapsed.

To meet this objection it has been suggested that Government might undertake the custody of the notes : thus, a note might be received from A B and registered as belonging to him, a *non-transferable* receipt being given in exchange. This procedure would, however, in all probability impose a considerable amount of additional work on Treasury officers, and, so far as the holder of the note is concerned, it would be better for him to have recourse to the ordinary Savings Bank. It could, however, be ruled that notes aggregating less than Rs. 250 should not be deposited in this way, while the existing rules which govern the case of lost or destroyed stock notes might be somewhat relaxed in the case of notes of small value.

11. Stock notes are payable to bearer, and there are many objections to a relaxation in the case of stock notes of the rules regarding the repayment of lost or destroyed currency notes. It has, however, been urged that should Government be prepared to accept a small amount of risk, the rules might be relaxed, (1) when the amount at stake is small ; and (2) when satisfactory evidence is given to show that the note has been destroyed. For instance, if the amount of the claim did not exceed Rs. 250, and the District Officer and the Comptroller General were satisfied from the evidence produced that the note had been destroyed, payment might be made at once, a bond being given by the claimant with two sureties. It has also been suggested that if the note were lost under circumstances which rendered it improbable that it would ever be presented for payment, and if

its amount did not exceed Rs. 100, the value of the note might be paid after the lapse of one year ; if the amount of the claim exceeded Rs. 100 but did not exceed Rs. 250, the amount might be paid after the lapse of two or three years ; and if the amount lay between Rs. 250 and Rs. 500, payment might be made after the lapse of three or five years. In all other cases the ordinary procedure would be followed. Appendix A to the Resolution shows the rules now in force.

12. Government, however, cannot overlook the fact that there is considerable danger in relaxing the rules regarding the repayment of lost or destroyed stock notes. It has been urged that an indemnity is really worthless ; that every attempt to realise it would cost ten times as much as allowing it to drop ; and that there will not be in ordinary cases the least chance of recovering anything from the debtor. It is also said that the holder of a stock note who has lost it has no more moral claim against the State than the holder of a rupee who has lost it ; that he is responsible for taking care of his own property and should bear his own loss ; and that the only ground on which the State undertakes to make good losses in some cases is, that the holder of the lost note has borne the loss, while the State has made a gain and can therefore afford to make up his loss, provided, of course, absolute or practical immunity can be secured. It is further argued that the people who will have to be chiefly dealt with in the matter of stock notes lost or destroyed are people to whom the holding of a small sum as a permanent investment is a matter of importance and who presumably occupy a humble position in life,—people who cannot probably write, and who in all probability cannot keep anything in the way of accounts, and who can, therefore, never be in a position to produce satisfactory evidence to prove the absolute destruction of a particular stock note during the time it has been in their possession ; that it is the taxpayer's, not the loser's interest which the State should consult ; and that no terms on which the State can offer to make good losses will be the slightest encouragement to purchasers, unless they are such as to lay it open to easy frauds, and involve it in losses which it ought not to bear.

13. The Governor-General in Council cannot but admit that a person who loses a stock note has no claim on Government ; but the ultimate object of Government is not to remedy the effects of carelessness or accident by an individual holder, but to introduce such rules as, without causing loss to the State, will not prove a bar to persons who wish to invest money in stock notes. If Government can satisfy the public that they have a good chance of getting their money back in case of loss it will have gained its object ; and when it is said that the money could never be recovered from the sureties or the debtor, the great collateral advantage which Government obtains by insisting on sureties is apparently overlooked. The bond of the two sureties is the strongest possible evidence to the fact that the claim is made in good faith. What Government has to fear is fraud ; and if two respectable men who know the claimant will put their names to a bond agreeing to pay in case the note said to have been lost is found, Government obtains a very good guarantee that the note has really been lost.

14. A fourth objection to stock notes is, that interest is not payable

on a divided note ; the Governor-General in Council is of opinion that there could be no objection to pay interest on a divided note, provided that the pieces making up the whole note were produced.

15. It is also worth considering whether private individuals might not be licensed as vendors of stock notes.

16. Before arriving at any final decision on the various questions referred to in this Resolution the Governor-General in Council would be glad to be favoured with the views of the several Local Governments and Administrations.

The Governments of Madras, Bombay and Bengal are particularly requested, before submitting their final report, to consult the local Chambers of Commerce and the principal local Banks with reference to the points discussed in this Resolution.

D. M. BARBOUR,
Secretary to the Government of India.

By order of His Excellency the Right Hon'ble the
Governor in Council,

J. NUGENT,
Secretary to Government.

*Appendix A to Financial Resolution No. 2599, dated 10th
August 1883.*

No. 3742, dated 19th September 1882.

RESOLUTION—By the Government of India, Department of Finance.

The Governor-General in Council is pleased to prescribe the following Rules for regulating the payment of stock notes alleged to have been lost or destroyed :—

1. When any person desires to make a claim for the value of a stock note alleged to have been lost or destroyed, he should at once produce before the District Officer all the evidence he can produce regarding the circumstances of the destruction or loss of the note, which must be absolutely identified. The District Officer may either reject the claim, or if he is of opinion that the evidence establishes beyond doubt the impossibility or extreme improbability of the note ever being presented, he should record his opinion to this effect, and forward it to the Comptroller-General. The latter, if he agrees as to the effect of the evidence, may direct as follows :—

- (1) That the loss of the note be advertised in the *Gazette of India* and the Local Government Gazettes, and that after two years from the first advertisement of the loss the value of the note may be paid by the District Officer and invested, if possible, in Government Securities, or, if the amount is too small, then paid into the Government Savings Bank.
- (2) That after twenty years from the date of advertisement, if meantime the note has not been presented for payment, the

said investment, with accumulated interest (or the said deposit, if no investment has been made), be delivered to the claimant or his assignee, or other legal representatives, upon, a bond of indemnity, with two personal sureties attached.

2. If the Comptroller-General think that the circumstances warrant more favourable terms to the claimant, he may, if he think fit, submit the case to the Government for orders ; but this is not to be done unless the evidence establishes a claim of Rs. 100 at least ; nor is the period after which delivery to the claimant may be made to be reduced, under any circumstances, below five years.

Ordered, that these Rules be published in the *Gazette of India* for general information, and communicated to the Comptroller-General for information and guidance.

BOMBAY CHAMBER OF COMMERCE, 8th December, 1883.

To the UNDER-SECRETARY to GOVERNMENT, Financial Department, Bombay.

SIR,—I am directed to acknowledge the receipt of your letter No. 3305, dated the 11th September last, forwarding copies of the Government of India's Resolution No. 2599, of the 10th of August, on the subject of the means to be adopted for encouraging investments in stock notes, and requesting the Chamber to favour Government with its views, after consulting the principal local Banks, on the several points discussed in the resolution.

The Committee having referred the Resolution to the various Banks and to persons of experience in such matters, have now the honour to submit their views on the subject.

The chief cause which militates against the popularity of the stock note system appears to be that the price at which the notes are issued is higher than the rate at which the 4 per cent. Government loans are allotted, and that, for this and other reasons, they compare unfavourably as an investment with the latter security. It results that stock-notes have proved to be most difficult of negotiation, and that the holder of them is confronted with the alternative of having his money locked up for a period of twenty years or of realizing at a heavy discount.

The low denominations of the regular Government Loan notes, and the widely extended system of Savings Banks, offer to the class of small investors, to whom the stock note system was specially addressed, facilities for depositing small sums of money at interest, which must always compete very seriously with the popularity of the latter scheme, and, it appears to the Committee, leave little or no room for its successful operation.

There does not, moreover, appear to be any likelihood at present of the demand for stock notes increasing to any appreciable extent in the Presidency towns. The tendency for many months has been for the

ordinary 4 per cent. Government Paper to be under par, and while this continues to be the ordinary state of the market for an investment—admittedly more advantageous in many respects,—particularly in its possessing the great advantage of being enfaceable for transmission to Europe,—little progress can be made in the issue of stock notes. Of late the demand for Government Paper for Europe has well nigh ceased, and, further, considerable amounts of Rupee Paper have been returned from Europe to India. The immediate cause of this has been that Banks, Insurance Companies, and other institutions at home have been alarmed at the fluctuations in the price of silver and the securities based on it, and have preferred securities based on gold although yielding a lower rate of interest. The great fluctuations in silver a year ago were no doubt largely due to the Indian Council holding back their drawings month after month for what proved to be a *fancy* rate of exchange. Since they have returned to the system of meeting the market demand each week, silver has shown more firmness and steadiness. It is therefore possible that Rupee Paper may in course of time resume its former position in Europe. But it is pretty well understood that Government intend adhering to their present policy of raising in India all further loans for Public Works. Looking to the violent fluctuations which are common in the Indian money markets, and the great development which is taking place in the general trade of India, it would be hazardous to calculate on a permanently easy money market in this country. Money has lately become much easier here, and yet 4 per cent. paper is considerably below par, while 4½ per cent. paper is only at a small premium. It is considered a not impossible contingency that Government may have again to resort to a 4½ per cent. loan in renewal of existing 4½ per cents. when these become due, or in raising fresh loans for Public Works. But in any case there seems, in existing circumstances, to be little room for 4 per cent. stock notes in the Presidency towns.

The Committee are of opinion that the time has not yet come for the successful introduction of the stock note system. The notes do not supply any real or recognised want existing in India, nor does there seem to be any sign of a demand springing up for them in the present condition of the country. While agriculturists live in the huts they at present inhabit, gold and silver ornaments must be much safer securities to hold than Government securities, nor will stock notes answer while we have a tight money market and the value of the ordinary 4 per cent. Government Paper stands below the issue price of stock notes.

With these general remarks on the system, the Committee now proceed to submit their opinion on the various suggestions discussed in the following paragraphs of the Resolution.

Para. 4.—The suggestion that stock notes should be receivable in payment of Government demands seems to the Committee to hardly merit serious consideration.

Para. 5.—The suggestion that a market should be created by authorizing the sale of stock notes at the Presidency Towns, thereby encouraging capitalists to deal in them, appears to the Committee to be one worthy of adoption.

Paras. 6 and 7.—It is most unlikely that with their many disad-

vantages in comparison with Government Paper, the market for stock notes would ever become so great as to interfere with the borrowing powers of Government in the ordinary way. On the other hand it is probable that the market so created would be the means of stock notes finding their way into the hands of investors who do not at present hold, nor are likely to be holders of, ordinary Government Paper.

Para. 9.—The objection founded on the non-payment of interest in Circles other than that at which a note has been issued, if it has been felt as an obstacle to the sale of stock notes, can easily be obviated in the manner indicated in the Resolution.

Para. 10, 11, 12 and 13.—With regard to the objection that stock notes are liable to be lost or destroyed, and that their value can be obtained only with great difficulty, and after a long time has elapsed, the Committee think that Government, with the view of encouraging the issue of stock notes, might well accept a moderate risk in the case of small amounts, and when satisfactory evidence has been obtained of the note having been destroyed. An officer in the position of the Comptroller-General might be allowed to exercise a wide discretion in the matter of making immediate or early payment in such cases. In the Resolution it appears to be accepted as probable that in the case of a note which had been lost or was supposed to be destroyed, and the amount of which had been repaid to the claimant under the usual guarantee turning up again, the indemnity would be worthless. The Committee agree with the conclusion arrived at in the Resolution that the fact of two respectable men promising to pay in the event of the note being found of itself affords a guarantee that the note has really been lost; but the District Officer could surely take care that the guarantors were such that, in the improbable event of a claim being made on them, one or other of them would be able to meet it without much trouble.

* Para. 14.—The Committee can see no objection to paying interest on a divided note, if the pieces making up the whole note are produced.

Para. 15.—The Committee do not see any reasons why private individual might not be licensed as vendors of stock notes.

In conclusion, the Committee desire to add that if it is the intention of Government to persist with the scheme the following suggestions bearing upon its working might be worthy of consideration, and they believe that their adoption might tend to somewhat lessen the disfavour in which the notes are now held :—

- (1) They would suggest that the notes be made redeemable within the shortest possible term of years compatible with the objects of Government in the introduction of the scheme. Any reduction from the present term of years would, they think, tend to increase their negotiability.
- (2) That the interest on the notes be made payable half-yearly, and that some arrangement be adopted by which the payment of that interest could be transferred from one Circle to another.

- (3) That the proposal contained in para. 11 of the Resolution be adopted.
- (4) That the discount of 1 per cent. now given to the licensed vendors be applied instead towards a reduction of the rates at which the notes are issued.
- (5) That the appearance and size of the notes be improved, and that they bear the signature of a responsible officer of Government.—I have, &c.,

J. GORDON, Secretary.

APPENDIX NN.

PROFESSIONAL COSTS OF SUCCESSFUL PARTIES IN THE SMALL CAUSES COURT IN SUITS UNDER PRESENT EXISTING JURISDICTION.

BOMBAY CHAMBER OF COMMERCE, 12th December, 1883.

J. F. SPENCER, Esq., Registrar of the Court of Small Causes, Bombay.

SIR,—The attention of the Committee of this Chamber has recently been called to the operation of the existing rule as to the allowance of professional costs to successful parties in the Small Cause Court, especially in suits under the present extended jurisdiction, and as the Committee consider that the matter is one which affects the interests of the mercantile community, I am desired to address you on the subject, and to request that you will do me the favour to bring this letter to the notice of their Honors the Judges of that Court.

The Committee understand that the existing practice even in suits above Rs. 1,000, is that though the preparation of a plaint is now necessary, the only professional costs allowed to the plaintiff is an attendance fee in case the defendant appears and makes a defence, and the Committee believe that the operation of this practice is to throw on successful parties costs which should fall on the losers.

The Committee desire to confine their representations to suits above Rs. 1,000, and, without seeking to disturb the existing practice as to the remuneration allowed in ordinary cases when the suit is defended, and no special applications to or attendances in Courts are requisite, beg to suggest that some modifications of the existing rule should be made in the following cases:—

- (a) When the defendant does not appear or defend the suit.
- (b) When special applications or attendances in Court other than the presentation of the plaint and the hearing are necessary.

As to the first-mentioned class of cases the Committee consider that since it is incumbent on a plaintiff to file a plaint, the preparation of which naturally necessitates a recourse to legal assistance for which he has to pay, there is no reason why some allowance, however moderate and however roughly fixed, should not be made and recoverable against the defendant, though the amount claimed may be afterwards paid into Court or the defendant may not appear or defend.

The Committee are aware that the Small Cause Court possesses no machinery by which costs can be taxed as they are in the High Court, but they see no reason why some allowance (either fixed or graduated)

should not be made, and its amount inserted in the summons in addition to Court fees.

In the next place the Committee consider that unless the amount claimed be paid into Court before the day fixed for hearing, a plaintiff (except perhaps in suits on bonds or notes) should be allowed some fee for the attendance of a legal practitioner which might be fixed by the Judge giving the decree, though the defendant may not appear or defend.

As to the second class of cases the Committee submit that in the case of interlocutory applications and attendances in Court other than the presentation of plaints and the hearing, there can be no reason why fees for such should not be allowed on the same principles as those on which the High Court would in similar instances make the costs costs in the cause or throw them on either side as justice might require.—I have, &c.,

J. GORDON, Secretary.

No. 8 OF 1884.

BOMBAY, 10th January, 1884.

FROM THE CLERK OF THE BOMBAY COURT OF SMALL CAUSES TO THE SECRETARY TO THE CHAMBER OF COMMERCE.

SIR,—I laid your letter of 12th December 1883 to myself before the Judges of this Court for their consideration immediately on its receipt. I am now desired by them to return you the following reply as a matter of courtesy to the Committee of the Chamber of Commerce. At the same time their Honors wish it to be understood that they are not prepared to admit either that the mercantile community of Bombay has so large an interest in the proceedings of the Small Cause Court as to warrant them in offering suggestions for its regulation; or that your Chamber is entitled to be considered as representative of the general mercantile community of Bombay, Native as well as European.

2. Their Honors think it would be inadvisable to make any binding rule on the subject of costs in undefended cases, the effect of which might be to hamper them in the exercise of the free discretion which they exercise under the existing law.

3. Your suggestion that the costs of drawing a plaint in suits for sums exceeding Rs. 1,000 should be allowed in *undefended* cases seems to their Honors to be inequitable. If these costs are to be allowed at all, they should be allowed in *all* cases. But to allow these costs at all in this Court appears to their Honors to be impracticable for many reasons. One of the chief of these is that noticed in your letter, that this Court has no machinery for taxing costs and determining the costs fairly payable in respect of each plaint. If it had, the time expended in so doing would detract largely from the value of the Court as a Court for the *speedy* determination of suits.

4. To fix a lump sum for all plaints, as proposed by you, is inadvisable, not only because all plaints are not equally costly, but because it is absolutely impossible to determine whether any

costs have been incurred in the preparation of a plaint. If a plaintiff draws his own plaint or gets it drawn for a few annas by a "law agent," he cannot be allowed to saddle the defendant with a lump sum in costs computed on the basis of professional charges for drawing a plaint. In the great majority of cases in this Court professional assistance in the drawing of a plaint is not absolutely necessary, and it seems to their honours that, the essence of a Small Cause Court being the administration of *cheap* justice, only those costs should be allowed which are absolutely necessary. Otherwise we should have a debt, the only reason for the non-payment of which is presumably, the inability of the debtor, swelled by the addition to it of the costs of the creditor needlessly incurred.

5. It is admitted by implication in your letter that in *defended* cases, where the costs of *appearance* are allowed, the costs so allowed are sufficient to cover the costs of the *plaint*. If this be so, it does not seem admissible to frame a separate rule providing for the costs of the plaint in *undefended* cases.

6. There is nothing either in the rules or the practice of the Court to prevent a Judge from granting the costs of the attendance of a professional appearance in an undefended suit. As a fact these costs are generally allowed in such cases if the defendant has led the plaintiff to believe he intends to defend the suit. But their Honours are of opinion (on the principle enunciated in the 4th para. above) that where the suit on the face of it admits of no defence, and the defendant has done nothing to lead the plaintiff to suppose he intends to defend it, a professional appearance at the hearing being, in fact, unnecessary, the costs of it ought not to be allowed against the defendant.

7. Their Honours are not aware that any interlocutory order necessitating a professional appearance has ever yet been applied for in a suit for a sum exceeding Rs. 1,000. If there should be, they will exercise their discretion in the matter of costs on the principles enunciated above.—I have, &c.,

ANUNDRAO BHASKERJEE,

Clerk of the Court.

APPENDIX OO.

APPLICATION OF THE FAMINE INSURANCE FUND AS A FUND WITH WHICH TO RAISE LOANS FOR THE CONSTRUCTION OF RAILWAYS.

MADRAS CHAMBER OF COMMERCE, *15th August, 1883.*

From the CHAIRMAN CHAMBER of COMMERCE, Madras, to the CHAIRMAN CHAMBER of COMMERCE, Bombay.

SIR,—The Chamber desire me to thank you for your letter of the 9th ultimo, which was accompanied by an interesting pamphlet on the development of railway communications in India. This Chamber fully concur with yours in the opinion that “too much importance cannot be attached to the existing necessity of largely and speedily extending the system of communications throughout the country.”

The extension of railways will not only induce a more rapid development of the export trade of the country, but will go far to ensure the safety of the inhabitants in times of famine, and thus tend to prevent those periodical depressions in Indian trade which are the results thereof.

It appears to this Chamber that if the Government of India, instead of setting apart $1\frac{1}{2}$ million a year out of the general taxes for works in connection with the prevention of famine, were at once to borrow the money necessary for the construction of railways, and pay the interest on the capital from the yearly Famine Fund, the extension of railways, which may be regarded as the best preventive works against famine, might be much more rapidly carried out. The difficulties experienced in connection with the construction of railways by private enterprise would hardly seem to justify the belief that the new railways in India will be constructed without the aid of Government. The practical question for consideration, therefore, is in what way can the Government ensure a more rapid extension of the railway system.

The Chamber would be glad to learn if your Chamber would be prepared to support them in the suggestion submitted in this letter.—I have, &c.,

J. C. SHAW, Chairman.

BOMBAY CHAMBER OF COMMERCE, *1st September, 1883.*

The CHAIRMAN of the CHAMBER of COMMERCE, Madras.

SIR,—I have submitted to the Committee of this Chamber your letter of the 15th ultimo, enquiring if this Chamber would be prepared to support the Madras Chamber in the suggestion that if the Gov-

ernment of India, instead of setting apart $1\frac{1}{2}$ million as a provision against famine, were at once to borrow money freely for the construction of railways, and pay the interest on the capital so borrowed from the Famine Fund, the extension of railways, which may be regarded as the best preventive works against famine, might be much more rapidly carried out.

In reply, the Committee direct me to say that the proposal has their entire approval, and that in their opinion the step suggested is precisely the one which the Government of India ought to take. They should use the Famine Fund for the purpose of borrowing money to make railways, instead of using the fund itself. The Committee will be prepared cordially to support your Chamber in the suggestion submitted in your letter.—I have, &c.,

J. GORDON, Secretary.

MADRAS CHAMBER OF COMMERCE, 19th October, 1883.

From the CHAIRMAN CHAMBER of COMMERCE, Madras, to the CHAIRMAN CHAMBER of COMMERCE, Bombay.

SIR,—The members of this Chamber have learnt with much satisfaction from your letter of the 1st ultimo that the Bombay Chamber are prepared to support this Chamber's suggestion that the Famine Insurance Fund should be regarded by the Government of India as a fund for guaranteeing interest on new railways and other public works, which are urgently required, both as preventive works against famine and for developing the trade of the country.

I have now been desired to furnish you with a copy of the following resolution which was passed at the last General Meeting of this Chamber, and which will be communicated to the Government of India with a strong recommendation that they should take action in the direction suggested in the resolution. As any suggestion from this Chamber will be much strengthened by the support of your Chamber, I would ask you to be good enough to take an early opportunity of bringing the subject discussed in this resolution, under the notice of the Government of India.

“That the Madras Chamber of Commerce consider that the present system of only expending the sum annually levied for Famine Insurance is unsatisfactory, as being inadequate to the growing wants of the country, and dangerously deferring, for so many years, works of such vital importance as preventives against famine. Further that the Chamber consider that for some years, and until the necessary preventive works are well in hand, that the Government should borrow for public works such sums, the interest on which will not exceed the sum levied as a Famine Insurance. That the views of this Chamber be communicated to the Chambers of Commerce of Bengal and Bombay, and that their aid be requested.”—I have, &c.,

J. C. SHAW, Chairman,

BOMBAY CHAMBER OF COMMERCE, *15th November, 1883.*

To the CHAIRMAN CHAMBER of COMMERCE, Madras.

SIR,—I have laid your letter of the 19th ultimo before the Committee of this Chamber, who desire me to ask you if you will be so good as to forward to them, for their guidance in addressing the Government of India in support of the views of your Chamber, a copy of the letter which you have sent to that Government, recommending them to take action in the direction suggested in the resolution which was passed at the last General Meeting of your Chamber.—I have, &c.,

J. GORDON, Secretary.

MADRAS CHAMBER OF COMMERCE, *20th November, 1883.*

To the SECRETARY CHAMBER of COMMERCE, Bombay.

SIR,—In compliance with the request contained in your letter to the address of the Chairman, dated the 15th instant, I beg to enclose a copy of the letter addressed by this Chamber to the Government of India on the subject of using the Famine Insurance Fund for the construction of railways, &c.—I remain, &c.,

C. A. LAWSON, Secretary.

MADRAS CHAMBER OF COMMERCE, *19th October, 1883.*

To the SECRETARY to GOVERNMENT of INDIA, P. W. Department, Simla.

SIR,—I have the honour to forward for your information the copy of the following resolution which was passed at the last General Meeting of this Chamber, and to request that you will have the goodness to bring the same under the consideration of H. E. the Viceroy in Council :—

“ That the Madras Chamber of Commerce consider that the present system of only expending the sum annually levied for Famine Insurance is unsatisfactory, as being inadequate to the growing wants of the country, and dangerously deferring, for so many years, works of such vital importance as preventives against famine. Further that the Chamber consider that for some years, and until the necessary preventive works are well in hand, that the Government should borrow for public works such sums, the interest on which will not exceed the sum levied as a Famine Insurance. That the views of this Chamber be communicated to the Chambers of Commerce of Bengal and Bombay and that their aid be requested.”

Having submitted the suggestion embodied in this resolution to the Bombay Chamber, I am informed by that Chamber that “ the proposal has their entire approval, and that, in their opinion, the step

suggested is precisely the one which the Government of India ought to take." The Bombay Chamber add : " They (the Government of India) should use the Famine Fund for the purpose of borrowing money to make railways, instead of using the fund itself. The Committee will be prepared cordially to support your Chamber in the suggestion submitted in your letter."—I have, &c.,

J. C. SHAW, Chairman.

BOMBAY CHAMBER OF COMMERCE, *5th December, 1883.*

To the SECRETARY to the GOVERNMENT of INDIA, Public Works Department, Calcutta.

SIR,—I have the honour, by direction of the Committee of this Chamber, to submit, for the favourable consideration of His Excellency the Viceroy and Governor-General in Council, the following Resolution, which has been passed by the Madras Chamber of Commerce :—

"That the Madras Chamber of Commerce consider that the present system of only expending the sum annually levied for Famine Insurance is unsatisfactory, as being inadequate to the growing wants of the country, and dangerously deferring, for so many years, works of such vital importance as preventives against famine. Further that the Chamber consider that for some years, and until the necessary preventive works are well in hand, the Government should borrow for Public Works such sums, the interest on which will not exceed the sum levied as a Famine Insurance. That the views of this Chamber be communicated to the Chambers of Commerce of Bengal and Bombay, and that their aid be requested."

The views therein expressed have, so far as they go, the entire approval of this Chamber, and the Committee hope that they will commend themselves to His Excellency.

Extended facilities for communication are one of the most valuable means of promoting the advancement of the prosperity of this country, the beneficial utilization and development of its great material resources, and the progress of its people ; and are calculated to check and prevent grave disasters from local and periodical famines more than, probably, any other gift the Government can bestow upon the poorer classes. The Chamber cannot but view with profound regret the lamentably defective state of the present railway communications, and the very slow progress which is being made towards extending them sufficiently to meet the great and growing wants of the country.

The Committee, therefore, desire also to advocate, in addition to the proposal made by the Madras Chamber, the application, in whole or in part, of the two-and-a-half millions sterling, that Government now provide annually, as a fund with which to raise the capital required to construct State Railways on a large and comprehensive scale within the next few years, or to supplement, by way of loan, the capital of the existing Railway Companies, thus securing for the country and the finances of the State at an early period the benefit

that cannot fail to follow the judicious extension of new and carefully laid out lines.

The Committee further desire to suggest that a Special Commission to consider and report on the lines of railway needed and to be undertaken might be appointed by the Government of India.—I have, &c.,

JAMES THORBURN, Chairman.

J. GORDON, Secretary.

BOMBAY CHAMBER OF COMMERCE, *7th December, 1883.*

The SECRETARY CHAMBER OF COMMERCE, Manchester.

DEAR SIR,—I am directed to forward to you five copies of a letter, dated 5th instant, addressed by this Chamber to the Government of India in support of a resolution passed by the Madras Chamber of Commerce to the effect that the Government should borrow for public works such sums, the interest on which would not exceed the sum levied as a Famine Insurance,—viz., £1,500,000. The Committee of this Chamber, however, go further than this; they advocate, in addition to the proposal made by the Madras Chamber, the application, in whole or in part, of the 2½ millions sterling, which Government now raise or provide annually for productive public works as a fund with which to pay interest on the capital required to be raised to construct State Railways on a large and comprehensive scale within the next few years, or to supplement by way of loan the capital of the existing Railway Companies.

The Committee desire me to express their hope that the proposals made in this letter may receive the cordial support of your Chamber, and they would be much obliged to you if you would kindly cause this letter to be published in the newspapers in England, along with any letters or memorials which your Chamber may think it advisable to write on the subject to the Secretary of State for India.

The Government of India are quite alive to the great necessity which exists for rapidly developing the country by means of railway extensions; but although these extensions would have the best effect on the commerce and people of India, they are delayed by the action of the Home authorities; and the Committee apprehend that unless this all-important question is taken up vigorously by the English Chambers and pressed upon the attention of the Government, the progress, which will be made in railway construction in India, will continue at the same slow rate at which it has hitherto done.

Should your Chamber disapprove of, or prefer any other mode, than that here suggested, of raising the necessary capital for the rapid extension of railways on a large and comprehensive scale, the Committee nevertheless hope that you will urge upon the Government that such extensions should be taken in hand at once and prosecuted with the utmost possible expedition, as being better calculated than any other means to promote the interests of India.—I have, &c.,

J. GORDON, Secretary.

Similar letter to the Chambers of Commerce of London and Liverpool.

No. 84 R.C.

GOVERNMENT OF INDIA.
PUBLIC WORKS DEPARTMENT.
RAILWAY CONSTRUCTION.FORT WILLIAM, 31st *January*, 1884.To the ⁶SECRETARY to the CHAMBER of COMMERCE, Bombay.

SIR,—I am directed to acknowledge the receipt of your letter of the 5th December 1883, submitting the favourable consideration of His Excellency the Viceroy in Council a resolution passed by the Bombay Chamber of Commerce, bringing to notice the inadequacy of the system at present in force for the development of railway communications in this country, and making certain suggestions in connection therewith.

2. In reply, I am to inform you that the proposals of the Chamber have been transmitted to the Secretary of State for India for consideration.—I have, &c.,

J H. SARJEAUNT, Major, R.E.,
Officiating Under-Secretary.

APPENDIX PP.

WEEKLY CURRENT QUOTATIONS as estimated by the Committee of the Chamber of Commerce during the Year 1883.

QUOTATIONS.	Week ending 4th January.	Week ending 11th January.	Week ending 18th January.	Week ending 25th February.	Week ending 1st February.	Week ending 8th February.
EXCHANGE.						
On England, Bank Bills	Sight ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.
" " 3 m'ths "	ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.
" " 6 " "	ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.
" " 6 " "	.....	.....	.....	.....	.....	.....
First-class Credits .. 3 "	ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.
" " 6 " "	ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.
Documents 3 "	ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.
" " 6 " "	ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.	ls. 7½d.
Paris Francis Mercan- tile Bills 3 "	None	206½	206½	207	206½	206½
Banks, Calcutta, on Demand ... 100	100	100½	100½	100½	100½	100½
China Mercantile Bills 60 days' Sight	219	222	224	222	223	223
Eng. Bar Gold, 100 touch (pertsol)	Rs. 19.14.0	Rs. 19.14.0	Rs. 19.13.0	Rs. 19.14.0	Rs. 19.14.0	Rs. 19.14.6
Sovereigns 12.4	Rs. 12.4	Rs. 12.4.9	Rs. 12.4.6	Rs. 12.5.0	Rs. 12.4.0	Rs. 12.4.0
RATES OF DISCOUNT.						
Bank Rate of Discount on Private Bills	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged	Unchanged
" " Loans on Govt. Securities	"	"	"	"	"	"
GOVERNMENT SECURITIES.						
Four per cents. 100½	100½	100½	100½	101½	101½	101½
Four-and-a-half per cents. ... 106½ to 107	106½ to 107	106½ to 107	106½ to 107	106½ to 107	106½	106½
IMPORTS.						
PEACE GOODS—						
Grey Shirtings 7lbs. 38-39in. (12 by 11) to (13 by 12)	Quiet	Dull	Dull	Quiet	Quiet	Dull
" " 8lbs. 38-39in. (12 by 12) to (16 by 19)	Rs. 3.4	Rs. 3.2	Rs. 3 to 3.8	Rs. 3.7	Rs. 3.4	Rs. 3.4
" Madapolams 3lbs. 32in. (10 by 10) to (12 by 10)	4.2	4.4	3.8 to 4.8	4.2	4.2	4.2
Mule Twist, No. 40s per lb. 1.9	1.9	1.9	1.6 to 1.11	1.7½	1.8	1.7
Water " No. 30s " " 9	9	9 to 9½	9 to 9½	9 to 9½	9 to 9½	9 to 9½
Copper (Braziers), per cwt. Rs. 48 to 48½	Rs. 48 to 48½	Rs. 48 to 48½	Rs. 48.14	Rs. 48 to 48½	Rs. 48 to 48½	Rs. 48 to 48½
Yellow Metal, " " 37½	37½	37½	37½	37½	37½	37½
Welsh Bar Iron, per candy " 28	28	27 to 30	28 to 29	28 to 29	28 to 30	28 to 30
Staffordshire Bar Iron, per candy " 30	30	32 to 33	32 to 33	30 to 31	31 to 33	30 to 33
Swedish Bar Iron " 42 to 43	43 to 45	43 to 45	43 to 45	43 to 45	41 to 43	42 to 45
Davidson's West Hartley Coal (per ton) alongside. " 16	16	16	15	15	15	15½
Welsh Hartley Coal (per ton) " 15½	15½	15½	14½	14½	14½	14½
Cardiff Coal (per ton) " 16	16	16	16	15½	17	17

EXPORTS.

COTTON—

Market

Dull & Drooping

Dull.

Quiet but steady

Steady.

Very Dull.

Rs. 200

" 190 to 195

" 177

" 173 to 174

" 170 to 172

" 187

" 177

" 172

" 177

" 172

" 177

" 172

" 165

" 175

" 168 to 170

" 165

" 162

" 144

" 136

" 129

" 180

" 173 Apl. dly.

" 169 Apl. dly.

" 32 to 36

" 5-6

" 7-10

" 32

" 26

" 1235

" 1185

Rs. 195 to 198

Nominal.

Rs. 168 to 169

" 165 to 166

" 162

" 181

" 170

" 165

" 169 to 170

" 165

" 160

" 143 to 144

" 135 to 136

" 128

" 172 to 175

" 167

" 165

" 29 to 36

" 5-5

" 7-10

" 31

" 25½

" 1225

" 1150

Rs. 192

Nominal.

Rs. 169 to 170

" 166 to 168

" 158 to 162

" 180

" 173

" 167

" 160

" 170 to 172

" 163 to 167

" 160

" 142 to 144

" 135

" 128

" 178

" 166

" 162

" 29 to 36

" 5-5

" 7-7

" 31

" 25½

" 1230

" 1140

Rs. 167 to 172

" 167

" 163

" 181

" 175

" 170

" 173

" 168 to 169

" 163

" 143

" 136

" 129

" 181

" 167

" 170

" 173 to 174

" 168 to 169

" 163

" 143

" 136

" 127

" 180

" 166

" 162

" 30 to 36

" 5-3

" 5-9

" 31

" 25½

" 1225

" 1130

Rs. 194 to 195

" 169

" 165 to 166

" 162

" 180

" 172

" 167

" 171 to 172

" 166 to 167

" 158

" 143

" 136

" 127

" 180

" 166

" 162

" 30 to 36

" 5-3

" 5-9

" 31

" 25½

" 1225

" 1130

Rs. 194 to 195

" 169

" 165 to 166

" 162

" 180

" 172

" 167

" 171 to 172

" 166 to 167

" 158

" 143

" 136

" 127

" 180

" 166

" 162

" 30 to 36

" 5-3

" 5-9

" 31

" 25½

" 1225

" 1130

Rs. 194 to 195

" 169

" 165 to 166

" 162

" 180

" 172

" 167

" 171 to 172

" 166 to 167

" 158

" 143

" 136

" 127

" 180

" 166

" 162

" 30 to 36

" 5-3

" 5-9

" 31

" 25½

" 1225

" 1130

Rs. 194 to 195

" 169

" 165 to 166

" 162

" 180

" 172

" 167

" 171 to 172

" 166 to 167

" 158

" 143

" 136

" 127

" 180

" 166

" 162

" 30 to 36

" 5-3

" 5-9

" 31

" 25½

" 1225

" 1130

Rs. 194 to 195

" 169

" 165 to 166

" 162

" 180

" 172

" 167

" 171 to 172

" 166 to 167

" 158

" 143

" 136

" 127

" 180

" 166

" 162

" 30 to 36

" 5-3

" 5-9

" 31

" 25½

" 1225

" 1130

Rs. 194 to 195

" 169

" 165 to 166

" 162

" 180

" 172

" 167

" 171 to 172

" 166 to 167

" 158

" 143

" 136

" 127

" 180

" 166

" 162

" 30 to 36

" 5-3

" 5-9

" 31

" 25½

" 1225

" 1130

Rs. 194 to 195

" 169

" 165 to 166

" 162

" 180

" 172

" 167

" 171 to 172

" 166 to 167

" 158

" 143

" 136

" 127

" 180

" 166

" 162

" 30 to 36

" 5-3

" 5-9

" 31

" 25½

" 1225

" 1130

Rs. 194 to 195

" 169

" 165 to 166

" 162

" 180

" 172

" 167

" 171 to 172

" 166 to 167

" 158

" 143

" 136

" 127

" 180

" 166

" 162

" 30 to 36

" 5-3

" 5-9

" 31

" 25½

" 1225

" 1130

Rs. 194 to 195

" 169

" 165 to 166

" 162

" 180

" 172

" 167

" 171 to 172

" 166 to 167

" 158

" 143

" 136

" 127

" 180

" 166

" 162

" 30 to 36

" 5-3

" 5-9

" 31

" 25½

" 1225

" 1130

Rs. 194 to 195

" 169

" 165 to 166

" 162

" 180

" 172

" 167

" 171 to 172

" 166 to 167

" 158

" 143

" 136

" 127

" 180

" 166

" 162

" 30 to 36

" 5-3

" 5-9

" 31

" 25½

" 1225

" 1130

Rs. 194 to 195

" 169

" 165 to 166

" 162

" 180

" 172

" 167

" 171 to 172

" 166 to 167

" 158

" 143

" 136

WEEKLY CURRENT QUOTATIONS for the Year 1883—continued.

Quotations.	Week ending 29th March.	Week ending 5th April.	Week ending 12th April.	Week ending 19th April.	Week ending 26th April.	Week ending 3rd May.
EXCHANGE.						
On England, Bank Bills Sight	1s. 7½d.	1s. 7½d.	1s. 7½d. to ¾d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 3 mths "	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 4 " "	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 6 " "	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
First-class Credits...	1s. 7½d.	1s. 7½d. to ¾d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
Documents...	1s. 8½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 3 " "	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 6 " "	1s. 8½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
Paris Frances Mercan-						
tile Bills ... 3 "	2-08	2-07	2-06½	2-06½	2-07½	2-07½
Banks, Calcutta, on Demand	100	100½	100	100	100	100
China Mercantile Bills, 60 days Sight	219 to 220	220	220	220	220½	220½
Eng. Bar Gold, 100 touch (per tola)	Rs. 19-13	Rs. 19-13-6	Rs. 19-14	Rs. 19-14	Rs. 19-13-6	Rs. 19-14
Sovereigns	" 12-6	" 12-6-6	" 12-6-6	" 12-6-6	" 12-6-6	" 12-7
RATES OF DISCOUNT.						
Bank Rate of Discount on Private Bills	10 per cent.	10 per cent.	9 per cent.	9 per cent.	10 per cent.	11 per cent.
" " of Interest on Demand	8 "	8 "	7 "	7 "	8 "	9 "
Loans on Govt. Securities	100½	100½ to 101½	100½	100½	100½	100½
Four per cents.	105½	105½	105½	105½	105½	105
Four-and-a-half per cents. ...	105½	105½	105½	105½	105½	105
GOVERNMENT SECURITIES.						
Four per cents.	100½	100½ to 101½	100½	100½	100½	100½
Four-and-a-half per cents. ...	105½	105½	105½	105½	105½	105
IMPORTS.						
Piece Goods—	Quiet.	Quiet.	Quiet.	Quiet.	Quiet.	Steady.
Grey Shirtings 7lb. 38-39in.	Rs. 3-4	Rs. 3-7	Rs. 3-4	Rs. 3-4	Rs. 3-4	Rs. 3-2
(12×11 to 13×12)	4-1	4-1½	4-1	4-1	4-2	4-1
" 8½lb. 38-39in.	1-6	1-7	1-6	1-6	1-6	1-6
(12×12) to (16×14)	As. 8 to 8½	As. 8 to 8½	As. 8 to 8½	As. 8 to 8½	As. 8 to 8½	As. 8 to 8½
Madapolans 3lb. 32in.	8½ to 9	8½ to 9	8½ to 9	8½ to 9	8½ to 9	8½ to 9
Mule Twist, No. 40s, per lb...	Rs. 46	Rs. 46	Rs. 46½	Rs. 46½	Rs. 46½	Rs. 46
Water " No. 30s. "	36	36	36½	36½	36½	36
Yellow Metal, ... "	27 to 28	27 to 29	27 to 29	27 to 29	27 to 29	27 to 28
Copper (Braziers), per cwt. ...	30 to 32	30 to 32	30 to 32	30 to 32	30 to 32	30 to 32
W. Ash Bar Iron, per candy ...	42 to 45	42 to 45	42 to 45	42 to 45	42 to 45	42 to 45
Staffordshire Bar Iron, per candy	16	16½	16½	16½	16½	16½
Swedish Bar Iron ... "	14½	15	15	15	15	15
Davison & West Hartley Coal (per ton) alongside.	17	17	17	17	17	17
Welsh Hartley Coal (per ton) "	14½	15	15	15	15	15
Cardiff Coal (per ton) "	17	17	17	17	17	17

EXPORTS.

Corrosion—	Market	Dull & Drooping	Dull & Depressed	Better Demand.	Quiet.	Quiet.	Firm.
Broach, Good,	per candy	Rs. 193 to 195	Rs. 190	Rs. 193 to 195	Rs. 198 to 199	Rs. 194 to 200	Rs. 194 to 196
Hingunhaut, Good	"	"	"	"	"	"	"
Omrunttee, Good	"	"	"	"	"	"	"
" F.G.F.	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"
Akote, Best,	"	"	"	"	"	"	"
Bhownuggur, Good	"	"	"	"	"	"	"
" F.G.F.	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"
Dholera, Good	"	"	"	"	"	"	"
" F.G.F.	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"
Bengals, Fine	"	"	"	"	"	"	"
" F. Good	"	"	"	"	"	"	"
" Good	"	"	"	"	"	"	"
" F.G.F.	"	"	"	"	"	"	"
Sawginned Dharwar Good per	"	"	"	"	"	"	"
candy	"	"	"	"	"	"	"
" F.G.F. per candy	"	"	"	"	"	"	"
Westerns	"	"	"	"	"	"	"
" F.G.F.	"	"	"	"	"	"	"
"	"	"	"	"	"	"	"
Gingely Seed (per candy of 5 cwt.)	"	"	"	"	"	"	"
Linseed (per cwt.)	"	"	"	"	"	"	"
Rapeseed	"	"	"	"	"	"	"
Wheat (White Peasy), No. 1	"	"	"	"	"	"	"
" per candy of 756 lb.	"	"	"	"	"	"	"
" (Laskari) " of 728 lb.	"	"	"	"	"	"	"
Opium (Malwa) (perchest) Old.	"	"	"	"	"	"	"
" New.	"	"	"	"	"	"	"
FREIGHTS.							
Liverpool—Cotton, via Cape, (per ton=50 feet)	"	"	"	"	"	"	"
" via Suez Canal	"	"	"	"	"	"	"
" (per ton=40 feet)	"	"	"	"	"	"	"
" Wheat & Seeds	"	"	"	"	"	"	"
London—M' ment cargo P.&O. Co.	"	"	"	"	"	"	"
" Seeds,	"	"	"	"	"	"	"
" M' ment	"	"	"	"	"	"	"
" Seeds,	"	"	"	"	"	"	"
Barre—Cotton via Cl. (per ton of 40 ft.)	"	"	"	"	"	"	"
Trieste & Venice—Cotton	"	"	"	"	"	"	"
Marseilles and Genoa	"	"	"	"	"	"	"
China, Steamer (per ton, 40 feet)	"	"	"	"	"	"	"

WEEKLY CURRENT QUOTATIONS for the Year 1883—continued.

Quotations.	Week ending 10th May.	Week ending 17th May.	Week ending 24th May.	Week ending 31st May.	Week ending 4th June.	Week ending 11th June.
EXCHANGE.						
On England, Bank Bills	Sight 1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 3 mths "	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 4 " "	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 6 " "	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
First-class Credits ... 3 "	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 6 " "	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
Documents ... 3 "	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 6 " "	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
Paris Francs Mercan-	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
tile Bills ... 3 "	2-06½	2-06½	2-06½	2-06½	2-06½	2-06½
Banks, Calcutta, on Demand	100	100	100	100	100	100
China Mercantile Bills, 60 days Sight	220	220	220	220	220	220
Eng. Bar Gold, 100 tunc (per tona)	Rs. 20-0-6	Rs. 20-1	Rs. 20-1	Rs. 20-1	Rs. 20-1	Rs. 20
Sovereigns ... 12-7	12-8	12-7-6	12-7-6	12-7-6	12-7-6	12-7-6
RATE OF DISCOUNT.						
Bank Rate of Discount on Private Bills	11 per cent.	11 per cent.	11 per cent.	11 per cent.	11 per cent.	11 per cent.
" of Interest on Demand	9 "	9 "	9 "	9 "	9 "	9 "
Loans on Govt. Securities	100	100	100	100	100	100
GOVERNMENT SECURITIES.						
Four per cents ... 104½	104½	104½	104½	104½	104½	104½
Four-and-a-half per cents. ... 104½	104½	104½	104½	104½	104½	104½
IMPORTS.						
PIECE GOODS—						
Grey Shirtings 7th. 38-39in.	Quiet.	Quiet.	Quiet.	Quiet.	Quiet.	Quiet.
(12 x 11 to 13 x 12)	Rs. 3-2	Rs. 3-4	Rs. 3-4	Rs. 3-4	Rs. 3-3	Rs. 3-2 to 3-4
8½lb. 38-39in.	4-0	4-0	4-0	4-0	4-0	3-12 to 4-12
" (12 x 12 to 16 x 14)	1-4	1-4	1-4	1-4	1-4	1-7 to 1-8
Madapolams 3th. 32in.	As. 8½	As. 8 to 8½	As. 8 to 8½	As. 8 to 8½	As. 8 to 8½	As. 8 to 8½
Mule Twist, No. 40s. per lb.	8½ to 9	8½ to 9	8½ to 9	8½ to 9	8½ to 9	8½ to 9
Water Twist, No. 30s. "	Rs. 45½	Rs. 45½	Rs. 45½	Rs. 45½	Rs. 45½	Rs. 45½ to 47
Copper (Braziers), per cwt.	35½	35½	35½	35½	35½	35½
Yellow Metal	27 to 28	27 to 28	27 to 28	27 to 28	27 to 28	27 to 28
Welsh Bar Iron, per cwt.	32 to 33	32 to 33	32 to 33	32 to 33	32 to 33	32 to 33
Staffordshire Bar Iron, per cwt.	42 to 44	42 to 44	42 to 44	42 to 44	42 to 44	42 to 44
Swedish Bar Iron	14	14	14	14	14	14
Davidson's West Hartley Coal (per ton)	13½	13½	13½	13½	13½	13½
alongside.	15½	15½	15½	15½	15½	15½
Welsh Hartley Coal (per ton)	13½	13½	13½	13½	13½	13½
Cardiff Coal (per ton)	15½	15½	15½	15½	15½	15½

EXPORTS.

Corrosion—	Market	Quiet.	Firm.	Nothing doing.	Nothing doing.	Dull.	Dull & depressed.
per candy	per candy	Rs. 198 to 200	Rs. 196 to 200	Rs. 196	Rs. 196	Rs. 196	Rs. 190 to 196
Broach, " "	" "	188	" "	" "	" "	" "	" "
Hingunghaut, Good	" "	170 to 175	" 192 to 195	" 172 to 175	" 172 to 173	" 166 to 168	" 166 to 167
Oonrawuttee, Good	" "	166 to 170	" 168 to 170	" 165 to 168	" 165 to 167	" 161 to 164	" 161 to 162
" " F.G.F.	" "	160 to 164	" 165	" 160 to 162	" 160 to 162	" 158	" "
" " G.F.	" "	181	" 182	" 180	" 180	" 180 to 182	" "
" Akote, Best	" "	172 to 175	" 174	" 172 to 175	" 172 to 174	" 169 to 170	" 167
Bhowunggur, Good	" "	166 to 170	" 166	" 162 to 164	" 163 to 165	" 160 to 161	" 160 to 161
" " F.G.F.	" "	" "	158 to 160	" 158 to 160	" 158 to 160	" 158	" 157
Dhollera, Good	" "	170 to 174	" 172 to 173	" 172 to 173	" 170 to 173	" 167 to 169	" 166 to 167
" " F.G.F.	" "	166 to 168	" 166	" 163	" 162 to 164	" 161	" 160
" " G.F.	" "	160	" 158	" 158	" 158 to 159	" 158	" 157
Bengals, Fine	" "	161	" "	" "	" "	" "	" "
" " F. Good	" "	144	" 144	" 144	" 144	" "	" "
" " Good	" "	137	" 137	" 137	" 136	" 135	" 135
" " F.G.F.	" "	130	" 130	" 130	" 128 to 130	" 130	" 130
Sawgunned Dharwar Good per candy	" "	181	" 180	" 179	" 178	" 173 to 175	" 170
" " F.G.F. per candy.	" "	" "	" "	" "	" "	" "	" "
Westerns Good	" "	172	" 170	" 172	" 170 to 171	" 169 to 170	" 169
" " F.G.F.	" "	167	" 167	" 167	" 166 to 167	" 166 to 167	" 165
" " G.F.	" "	" "	" "	" "	" "	" "	" "
Gingilly Seed (per candy of 5 cwt.)	" "	29 to 36	" 29 to 37	" 29 to 37	" 30 to 36	" 31 to 37	" 30 to 37
Linseed (per cwt.)	" "	5-4	" 5-4½	" 5-4	" 5-4	" 5-4	" 5-4
Rapeseed	" "	7-10	" 7-11	" 7-11	" 7-12	" 7-12	" 7-10
Wheat (White Pessy), No. 1	" "	31½	" 31½	" 31	" 30½	" 31	" 31
" (Laakari) of 728 lb.	" "	26½	" 27	" 26	" 26	" 26½	" 26½
Opium (Malwa) (per chest) Old	" "	1210	" 1220	" 1230	" 1250	" 1260	" 1260
" " New.	" "	1140	" 1120	" 1160	" 1150	" 1160	" 1160
FREIGHTS.							
Liverpool—Cotton, via Cape, per ton to 40 feet.	" "	£2	£2	£2	£1-15 to £2	£1-15	£1-15
" " via Suez Canal, per ton to 40 feet.	" "	£1-12-6 to £1-15	£1-15	£1-13-9	£1-11-3 to £1-13-9	£1-8-9	£1-7-6
" Wheat & Needs	" "	£1-11-3 to £1-12-6	£1-10 to £1-13-9	£1-11-3 to £1-12-6	£1-11-3 to £1-12-6	£1-7-6	£1-6-3
London—Ment cargo P. & O. Co.	" "	£1-17-6 to £2	£1-17-6 to £2	£1-17-6 to £2	£1-17-6 to £2	£1-15	£1-15
" Seeds	" "	£1-15	£1-15	£1-13-9 to £1-15	£1-15	£1-12-6	£1-12-6
" M' ment " Cl. Str.	" "	£1-15	£1-15	£1-15	£1-12-6 to £1-15	£1-12-6	£1-12-6
" Seeds,	" "	£1-12-6 to £1-15	£1-12-6 to £1-13-9	£1-13-9	£1-12-6 to £1-13-9	£1-11-3	£1-10
Harve—Cotton via Cl. (per ton of 40 ft.)	" "	£1-13-9 to £1-15	£1-13-9 to £1-15	£1-13-9 to £1-15	£1-12-6 to £1-13-9	£1-12-6	£1-12-6
Trieste & Venice—Cotton	" "	£2-2-6 to £2-3-9	£2 to £2-3-9	£2 to £2-2-6	£2 to £2-2-6	£1-1-9	£2
Marseilles & Genoa	" "	£2 to £2-2-6	£2	£2	£1-11-3 to £2	£1-10-9	£2
China, Steamer (per ton, 40 feet)	" "	Rs. 15	Rs. 15	Rs. 15	Rs. 15	Rs. 15	Rs. 15

WEEKLY CURRENT QUOTATIONS for the Year 1883. — continued.

Quotations.	Week ending 18th June.	Week ending 25th June.	Week ending 2nd July.	Week ending 9th July.	Week ending 16th July.	Week ending 23rd July.
EXCHANGE.						
On England, Bank Bills Sight	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.
" " 3 mths "	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.
" " 4 " "	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.
" " 6 " "	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.
First-class Credits " 3 " "	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.
" " 6 " "	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.
Documents " " 3 " "	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.
" " 6 " "	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.	1s. 7 ³ / ₄ d.
Paris France Mercan- tile Bills " " 3 " "	2-10	2-08	2-08	2-08	2-07 ³ / ₄	2-07 ³ / ₄
Banks, Calcutta, on Demand	100 ¹ / ₂	100 to 100 ¹ / ₂	100	100	100	100
China Mercantile Bills, 60 days' Sight	221	221	221	221	220 ¹ / ₂	220
Eng. Bar Gold, 100 touch (per tola)	Rs. 19.14	Rs. 19.15.0	Rs. 19.14	Rs. 19.14	Rs. 19.14.6	Rs. 19.15.0
Sovereigns " " " "	Rs. 12-7-0	" 12-7-6	" 12-7-6	" 12-7-6	" 12-7-0	" 12-7-6
RATE OF DISCOUNT.						
Bank Rate of Discount on Private Bills	11 per cent.	11 per cent.	10 per cent.	10 per cent.	9 per cent.	9 per cent.
" of Interest on Demand	9 "	9 "	8 "	8 "	7 "	7 "
Loans on Govt. Securities	99 ¹ / ₂	99 ¹ / ₂	99 ¹ / ₂	99 ¹ / ₂	99	99
GOVERNMENT SECURITIES.	104 ¹ / ₂	104 ¹ / ₂	104 ¹ / ₂	104 ¹ / ₂	104 Nominal	104 Nominal
Four per cents. " " " "	104 ¹ / ₂	104 ¹ / ₂	104 ¹ / ₂	104 ¹ / ₂	104 Nominal	104 Nominal
Four-and-a-half per cents. " " " "	104 ¹ / ₂	104 ¹ / ₂	104 ¹ / ₂	104 ¹ / ₂	104 Nominal	104 Nominal
IMPORTS.						
PIECE GOODS—						
Grey Shirtings 7h. 38-39in.	Market	Market	Market	Market	Market	Market
" (12×11 to 13×12)	Rs. 3-4	Rs. 3-3	Rs. 3-3	Rs. 3-3	Rs. 3-4	Rs. 3-3
" 8h. 38-39in.	" 3-15	" 3-14	" 3-15	" 3-15	" 3-14	" 3-15
" Madapolams 3h. 32in.	" 1-4	" 1-4	" 1-6	" 1-4	" 1-4	" 1-3 ¹ / ₄
Mule Twist, No. 40s. per lb. ...	As. 8 to 8 ¹ / ₂	As. 8 to 8 ¹ / ₂	As. 8 to 8 ¹ / ₂	As. 8 to 8 ¹ / ₂	As. 8 to 8 ¹ / ₂	As. 8 to 8 ¹ / ₂
Water " No. 30s. " "	" 8 ¹ / ₂ to 9	" 8 ¹ / ₂ to 9	" 8 ¹ / ₂ to 9	" 8 ¹ / ₂ to 9	" 8 ¹ / ₂ to 9	" 8 ¹ / ₂ to 9
Copper (Braziers), per cwt. ...	Rs. 46	Rs. 46	Rs. 45 ¹ / ₂	Rs. 45 ¹ / ₂	Rs. 45 ¹ / ₂	Rs. 45 ¹ / ₂
Yellow Metal " " " "	" 35 ¹ / ₂	" 35 ¹ / ₂	" 35 ¹ / ₂	" 35 ¹ / ₂	" 35 ¹ / ₂	" 35 ¹ / ₂
Welsh Bar Iron, per candy ...	" 27 to 28	" 27 to 28	" 27 to 28	" 27 to 28	" 26 to 27	" 26 to 27
Staffordshire Bar Iron, per candy ...	" 30 to 32	" 30 to 32	" 30 to 32	" 30 to 32	" 30 to 31	" 30 to 31
Swedish Bar Iron " " " "	" 41 to 44	" 41 to 44	" 41 to 44	" 41 to 44	" 40 to 44	" 40 to 44
Davison's West Hartly Coal (per ton) ...	" 12	" 12	" 12 ¹ / ₂	" 12	" 12	" 13
Welsh Hartley Coal (per ton) ...	" 11	" 11 ¹ / ₂	" 11 ¹ / ₂	" 11 ¹ / ₂	" 11 ¹ / ₂	" 12
Cardiff Coal (per ton) ...	" 12 ¹ / ₂	" 12 ¹ / ₂	" 13 ¹ / ₄	" 13 ¹ / ₄	" 13 ¹ / ₄	" 15

EXPORTS.

Cotton—	Market	Nothing doing	Dull & neglected	Neglected	Very dull.	Without change	Dull.
Broach, Good, per candy	...	...	Rs. 190	Rs. 186	...	...	...
Hingunhaut, Good	...	...	...	...	...	...	...
Oomrawtee, Good	...	...	...	...	...	...	...
" F.G.F.	...	...	...	...	...	...	...
" G.F.	...	...	...	...	...	...	...
" Best,	...	...	...	...	...	...	...
Bhownagur, Good	...	...	...	...	...	...	...
" F.G.F.	...	...	...	...	...	...	...
" G.F.	...	...	...	...	...	...	...
Dhollera, Good	...	...	...	...	...	...	...
" F.G.F.	...	...	...	...	...	...	...
" G.F.	...	...	...	...	...	...	...
Bengals, Fine	...	...	...	...	...	...	...
" F. Good	...	...	...	...	...	...	...
" Good	...	...	...	...	...	...	...
" F.G.F.	...	...	...	...	...	...	...
" F.G.F.	...	...	...	...	...	...	...
Sawneged Dharwar, Good per	...	...	...	...	...	...	...
candy	...	...	...	...	...	...	...
" F.G.F. per candy.	...	...	...	...	...	...	...
Westerns, Good	...	...	...	...	...	...	...
" F.G.F.	...	...	...	...	...	...	...
" G.F.	...	...	...	...	...	...	...
Gingely Seed (per candy of 5 cwt.)	...	...	...	...	...	...	...
Linseed (per cwt.)	...	...	...	...	...	...	...
Rapeseed	...	...	...	...	...	...	...
Wheat (White Pessy), No. 1	...	...	...	...	...	...	...
" per candy of 756 lb...	...	...	...	...	...	...	...
" (Laskari) " of 728 lb...	...	...	...	...	...	...	...
Opium (Malwa) (per chest) Old	...	...	...	...	...	...	...
" New	...	...	...	...	...	...	...
" FREIGHTS.	...	...	...	...	...	...	...
Liverpool—Cotton, via Cape, (per ton—50 feet)...	...	...	...	...	...	...	...
" via Suez Canal	...	...	...	...	...	...	...
" (per ton—40 feet)...	...	...	...	...	...	...	...
Wheat & Seeds	...	...	...	...	...	...	...
London—M'ment cargo P.&O. Co.	...	...	...	...	...	...	...
" Seeds, " Cl. Str...	...	...	...	...	...	...	...
" M'ment " Cl. Str...	...	...	...	...	...	...	...
" Seeds, " "	...	...	...	...	...	...	...
Harve—Cotton via Cl. (per ton of 40 ft.)	...	...	...	...	...	...	...
Trieste & Venice—Cotton	...	...	...	...	...	...	...
Marseilles & Genoa	...	...	...	...	...	...	...
China, Steamer (per ton, 40 feet)	...	...	...	...	...	...	...

WEEKLY CURRENT QUOTATIONS for the Year 1883.—continued.

QUOTATIONS. FOR THE YEAR 1883.—Continued.						
	Week ending 30th July.	Week ending 6th August.	Week ending 13th August.	Week ending 21st August.	Week ending 27th August.	Week ending 3rd September.
EXCHANGE.						
On England, Bank Bills	Sight	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d. to 1s. 7½d.
" " 3 mths "		1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 4 " "		1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 6 " "		1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
First-class Credits...	3	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 6 " "		1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
Documents	"	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 3 " "		1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 6 " "		1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
Paris Francs Mercan-		1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
tile Bills ... 3	2-08½	2-08½	2-08½	2-09½	2-09½	2-09
Banks, Calcutta, on Demand	100	100	100	100	100	100
China Mercantile Bills, 60 days' Sight	220½	220½	220½	220½	220½	220½
Eng. Bar Gold, 100 touch (per tola)	Rs. 19-14	Rs. 19-14	Rs. 19-14	Rs. 19-14	Rs. 19-14	Rs. 19-14
Sovereigns	" 12-7	" 12-7	" 12-7	" 12-6-6	" 12-6-6	" 12-7
RATES OF DISCOUNT.						
Bank Rate of Discount on Private Bills	8 per cent.	8 per cent.	7 per cent.	7 per cent.	7 per cent.	7 per cent.
" " of Interest on Demand	6	6	5	5	5	5
Loans on Govt. Securities.	6	6	5	5	5	5
GOVERNMENT SECURITIES.						
Four per cents. ...	99½	98½	99½	99½	99½	99½
Four-and-a-half per cents	103½	103½	103½	104 to 104½	104	103½ to 104
IMPORTS.						
Pieces Goods—	Market	Quiet	Quiet	Quiet	Quiet	Quiet
Grey Shirtings 7½b. 38-39in.	Rs. 3-4	Rs. 3-4	Rs. 3-10 to 3-14	Rs. 3-4	Rs. 3-4	Rs. 3-4
" (12×11 to 13×12)	Rs. 3-4	Rs. 3-4	Rs. 3-10 to 3-14	Rs. 3-4	Rs. 3-4	Rs. 3-4
" 8½b. 38-39in.	Rs. 3-4	Rs. 3-4	Rs. 3-10 to 3-14	Rs. 3-4	Rs. 3-4	Rs. 3-4
" (12×12 to 16×14)	Rs. 3-4	Rs. 3-4	Rs. 3-10 to 3-14	Rs. 3-4	Rs. 3-4	Rs. 3-4
Madapollams 3½b. 32in.	Rs. 3-4	Rs. 3-4	Rs. 3-10 to 3-14	Rs. 3-4	Rs. 3-4	Rs. 3-4
Mule Twist, No. 40s per lb. ...	Rs. 8 to 8½	Rs. 8 to 8½	Rs. 8 to 8½	Rs. 8 to 8½	Rs. 8 to 8½	Rs. 8 to 8½
Water " No. 30s	Rs. 8 to 9	Rs. 8 to 9	Rs. 8 to 9	Rs. 8 to 9	Rs. 8 to 9	Rs. 8 to 9
Copper (Braziers), per cwt. ...	Rs. 45½	Rs. 45½	Rs. 45½	Rs. 45½	Rs. 45½	Rs. 45½
Yellow Metal do.	35½	35½	35½	35½	35½	35½
Welsh Bar Iron, per cwt. ...	26 to 27	26 to 27	26 to 28	26 to 28	26 to 28	26 to 28
Staffordshire Bar Iron, per cwt. ...	30 to 31	30 to 31	30 to 32	30 to 31	30 to 31	30 to 31
Swedish Bar Iron	40 to 44	40 to 44	40 to 44	40 to 44	40 to 44	40 to 44
Davison's West Hartley Coal	13½	15½	16½	15½	15	15½
(per ton) alongside.	13½	15½	16½	15½	15	15½
Welsh Hartley Coal (per ton)	13½	15½	16½	15½	15	15½
Cardiff Coal (per ton)	15½	16½	17½	16½	16½	16½

EXPORTS.

Cotton—	Market	Firm.	Firm	Steady.	Dull.	Steady.
Broach, Good, per candy...	...	...	...	...	{ Rs. 201 to 202 N. crop } Mar. dly.	Steady. Rs. 203 (N. Crop) March dly.
Hingunghant, Good "	...	...	...	...	...	...
Oomrawtee, Good "	...	...	...	...	...	...
FGF. "	...	...	...	...	...	...
G.F. "	...	...	...	...	...	...
Akote, Best "	...	...	...	...	...	...
Bhowninggur, Good "	...	...	...	...	...	...
" " F.G.F. "	...	...	...	...	...	...
" " G.F. "	...	...	...	...	...	...
Dhollera, Good "	...	...	...	...	...	...
" " F.G.F. "	...	...	...	...	...	...
" " G.F. "	...	...	...	...	...	...
Bengala, Fine "	...	...	...	...	...	...
" " F. Good "	...	...	...	...	...	...
" " Good "	...	...	...	...	...	...
" " F.G.F. "	...	...	...	...	...	...
Sawginned Dharwar Good & cdy	...	...	...	...	...	...
" " F.G.F. per candy "	...	...	...	...	...	...
" " Good "	...	...	...	...	...	...
Westerns, " "	...	...	...	...	...	...
" " F.G.F. "	...	...	...	...	...	...
" " G.F. "	...	...	...	...	...	...
Gingelly Seed (per candy of 5 cwt.)	...	...	...	...	...	...
Linseed (per cwt.)	...	...	...	...	...	...
Rapeseed "	...	...	...	...	...	...
Wheat (White Pessy), No. 1 per candy	...	...	...	...	...	...
" (Luskari) per cdy. of 728 lbs	...	...	...	...	...	...
Opium (Malwa) (per chest) Old	...	...	...	...	...	...
" " New	...	...	...	...	...	...
" FREIGHTS.	...	...	...	...	...	...
Liverpool—Cotton, via Capa, (per ton=30 feet)...	...	...	...	...	...	...
" " (per ton=40 feet)...	...	...	...	...	...	...
" " (per ton=50 feet)...	...	...	...	...	...	...
London—M'ment cargo P.&O.Cu.	...	...	...	...	...	...
Seeds, " "	...	...	...	...	...	...
" " M'ment "	...	...	...	...	...	...
" " Seeds, " "	...	...	...	...	...	...
" " Seeds, " "	...	...	...	...	...	...
Harve—Cotton via Cl. (per ton of 40 ft.)	...	...	...	...	...	...
Trieste & Venice—Cotton "	...	...	...	...	...	...
Marseilles & Genoa "	...	...	...	...	...	...
China, Steamer (per ton, 40 feet)	...	...	...	...	...	...
Australia "	...	...	...	...	...	...

WEEKLY CURRENT QUOTATIONS for the Year 1883--continued.

QUOTATIONS.	Week ending 10th September.	Week ending 17th September.	Week ending 27th September.	Week ending 4th October.	Week ending 12th Week ending 18th October.
EXCHANGE.					
On England, Bank Bills Sight	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 3 mths'	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 4 "	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 6 "	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
First-class Credits	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" 3 "	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" 6 "	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
Documents	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" 3 "	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" 6 "	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
Paris France Mercan- tile Bills	2-09½	2-09½	2-09½	2-09½	2-09½
Banks, Calcutta, on Demand	100½	100½	100½	100½	100½
China Mercantile Bills, 60 days' Sight	220½	220½	220½	220½	220½
Eng. Bar Gold, 100 touch (per tola)	Rs. 19-13	Rs. 19-13	Rs. 19-12	Rs. 19-12	Rs. 19-13
Sovereigns	" 12-6-6	" 12-6-6	" 12-5-6	" 12-5-6	" 12-5-6
RATES OF DISCOUNT.					
Bank Rate of Discount Private Bills,	7 per cent.	7 to 8 per cent.	8 per cent.	10 per cent.	10 per cent.
" of Interest on Demand	5 "	6 "	6 "	8 "	8 "
" Loans on Govt. Securities.	98½	98½	98½	98½	98½
Four per cents.	103½	103½	103½	103½	103½
Four-and-a-half per cents	103½	103½	103½	103½	103½
GOVERNMENT SECURITIES.					
PIECE GOODS—	Quiet.	Quiet.	Quiet.	Quiet.	Quiet.
Grey Shirtings 7½h. 38-39in.	Rs. 3-4	Rs. 3-4	Rs. 3-4	Rs. 3-4	Rs. 3-4
" (12×11 to 13×12)	" 3-14	" 3-14	" 3-14	" 3-14	" 3-14
" 8½h. 38-39in.	" 1-5	" 1-5	" 1-5	" 1-5	" 1-5
" (12×12 to 16×14).	As. 8½ to 8½	As. 8 to 8½	As. 8 to 8½	As. 8 to 8½	As. 8 to 8½
" Madapolams 3½h. 32in.	" 8 to 8½	" 8 to 8½	" 8 to 8½	" 8 to 8½	" 8 to 8½
" (10×10 to 12×10).	Rs. 46	Rs. 46	Rs. 46½ to 47	Rs. 46½ to 47	Rs. 46½ to 47
Mule Twist, No. 40s per lb.	" 35½	" 35½	" 35½	" 35½	" 35½
Water Twist, No. 30s per lb.	" 26 to 27	" 26 to 27	" 26 to 28	" 27 to 28	" 27 to 28
Copper (Braziers), per owt.	" 30 to 31	" 30 to 32	" 30 to 31	" 30 to 31	" 30 to 31
Yellow Metal	" 42 to 45	" 41 to 44	" 41 to 44	" 41 to 44	" 41 to 44
Welsh Bar Iron, per candy	" 16	" 16½	" 16½	" 16½	" 16
Staffordshire Bar Iron, per candy	" 15	" 15½	" 15½	" 15½	" 16
Swedish Bar Iron	" 17	" 17½	" 17½	" 17½	" 16½
Davidson's West Hartley Coal	" 15	" 15	" 15	" 15	" 15
(per ton) alongside.	" 15	" 15	" 15	" 15	" 15
Welsh Hartley Coal (per ton)	" 17	" 17	" 17	" 17	" 17
Cardiff (per ton)	" 17	" 17	" 17	" 17	" 17

EXPORTS.

COTTON—		Market	Firm.	Steady.	Dull.	Quiet.	Very Firm.	Quiet.
Broach, Good	per candy	...	{ Ra. 206 (New Crop) Mar. dly. }	Nominal.	{ Ra. 210 (N. Crop) March delivery. }	Ra. 213 (N. Crop) March delivery.	Ra. 217 (N. Crop) March delivery.	Ra. 212 (New Crop) March delivery.
Hingrunghat, Good	"	"	"	"	"	"	"	"
Oomrawuttee, Good	"	"	{ Ra. 178 (New) Crop Feb. dly. }	Ra. 170	{ Ra. 181 (New) Crop do. }	Ra. 182 (N. Crop) March delivery.	Ra. 186 to 188 do.	Ra. 185 do.
" F.G.F.	"	"	Ra. 157	" 164	Ra. 157	Ra. 159 to 162	" 165 to 166	" 178 do.
" G.F.	"	"	" 150 to 151	" 155	" 151	"	" 157	"
Akote, Best	"	"	"	"	"	"	"	"
Blownuggur, Good	"	"	"	" 170	"	"	"	"
" F.G.F.	"	"	"	" 163	"	"	"	"
" G.F.	"	"	"	" 182	"	"	"	"
Dhollera, Good	"	"	" 167	" 198	" 172	" 171	" 175	" 172
" F.G.F.	"	"	" 158	" 160	" 161	" 160	" 165	" 165
" G.F.	"	"	"	" 150	"	"	"	"
Bengals, Fine	"	"	"	"	{ Ra. 167 (N. Crop) Dec. delivery. }	Ra. 168 (N. Crop) Dec. delivery.	Ra. 170 (New Crop) Dec. delivery.	Ra. 168 to 169 (New Crop) Dec. delivery.
" Fully Good	"	"	{ Ra. 152 to 154 (N. Crop) Dec. dly. }	"	Ra. 155 do.	Ra. 158 do.	Ra. 157 do.	Ra. 156 to 157 do.
" Good	"	"	"	" 145	" 146 do.	" 147 do.	" 151 do.	" 148 to 150 do.
" Fully G.F.	"	"	Ra. 144 (N. Crop)	" 140	" 140 do.	" 140 do.	" 141 to 142	" 140 to 142
Sawgunned Dharwar, Good & ydy.	"	"	"	" 168	"	"	"	"
" F.G.F.	"	"	"	" 160	"	"	"	"
Westerns, Good	"	"	"	" 160	"	"	"	"
" F.G.F.	"	"	"	" 160	"	"	"	"
" G.F.	"	"	"	" 155	"	" 161	"	"
"	"	"	"	" 150	"	" 155	" 158	" 154 to 155
Gingelly Seed (per cdy. of 5 cwt)	"	"	{ Ra. 32 to 38 (Nov. Feb. dly.) }	"	Ra. 32 to 38 (Nov. Feb. dly.)	"	"	"
Lineed (per cwt.)	"	"	Ra. 5-13 Ready.	" 7 to 8 do.	" 32 1/2 Ready	" 33 to 38	" 34 to 37 1/2	{ Ra. 32 to 37 1/2 Oct. March dly. }
Rapesced "	"	"	" 7 to 8 do.	" 7-2 to 8-4 do.	" 26 1/2 do.	" 5-12	" 5-12	" 5-11 1/2 Ready
Wheat (White Pearl) No. 1 per candy of 756 lbs.	"	"	" 33 1/2 do.	" 34	" 32 1/2 Ready	" 7 to 8-8	" 6-10 to 8-4	" 6-14 to 8-1 do.
" (Laskari) per candy of 728 lbs.	"	"	" 26 1/2 do.	" 27	" 26 1/2 do.	" 32 1/2	" 31 1/2	" 31 do.
Opium (Malwa) (per chest) Old	"	"	" 1260	" 1260	" 1250	" 1160	" 1160	" 1165
" " New	"	"	" 1210	" 1210	" 1200	" 1110	" 1117	" 1130
FREIGHTS.								
Liverpool—Cotton via Cane, (per ton=50 feet.	"	"	"	"	"	"	"	"
" " via Suez Canal	"	"	"	"	"	"	"	"
" Wheat and Seeds (per ton=40 feet.)	"	"	"	" 20-17-6	" 21-2-6	" 20-18-9	" 21-2-6	" 21
London—M'ment Cargo P. & O. Co.	"	"	"	" 2-7-6	" 21	" 21	" 21	" 20-8-9
" Seeds	"	"	"	" 1-5	" 21-10	" 21-10	" 21-7-6	" 21-7-6
" M'ment Cargo Canal Sur.	"	"	"	" 21-2-6	" 21-7-8	" 21-7-8	" 21-5	" 21-2-6
" Seeds	"	"	"	" 21-8-9	" 21-2-6	" 21-5	" 21	" 21
Havre—Cotton via Canal 3/4 ton 40 ft.	"	"	"	" 21	" 21-7-6	" 21-8-6	" 21-7-6	" 21-3-9
Trieste & Venice—Cotton	"	"	"	" 21	" 21-5	" 21-5	" 21-5	" 21-5
Marseilles and Genoa	"	"	"	" 21-4	" 21-5	" 21-5	" 21-5	" 21-5
China Steamer (per ton), 40 feet	"	"	"	" 21-16	" 21-16	" 21-16	" 21-15	" 21-16
Australia	"	"	"	" 25	" 25	" 25	" 25	" 25

WEEKLY CURRENT QUOTATIONS for the Year 1883—continued.

Quotations.		Week ending 25th October.	Week ending 1st November.	Week ending 8th November.	Week ending 16th November.	Week ending 23rd November.
EXCHANGE.						
On England, Bank Bills	Sight	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½ to ¾d.
" " 3 mths	"	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.
" " 4 "	"	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.
" " 6 "	"	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.
First-class Credits	3 "	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.
" " 6 "	"	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.
Documents	3 "	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.
" " 6 "	"	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.	1s. 7¾d.
Paris Francs Mercantile Bills...	3 "	208½	208½	208½	208½	206½
Banks, Calcutta, on Demand	"	100½	100½	100½	100½	100½
China Mercantile Bills, 60 days' Sight	"	221	221	221	221	222
English Bar Gold, 100 touch (per tola)	Rs. 19-12-6	Rs. 19-13-6	Rs. 19-13-9	Rs. 19-13-9	Rs. 19-13-9	Rs. 19-14
Sovereigns	"	" 12-5-6	" 12-6-6	" 12-6-3	" 12-6-3	" 12-6-6
RATES OF DISCOUNT.						
Bank Rate of Discount on Private Bills	10 per cent.	8 to 10 per cent.	8 per cent.	8 per cent.	8 per cent.	8 per cent.
" " of Interest on Demand	"	8	6	6	6	6
Loans Govt. Securities	8	98½	98½	98½	98½	99½
GOVERNMENT SECURITIES.	"	102½ to 102½	102½	102½	102½	102½
Four per cents.	"	"	"	"	"	"
Four-and-a-half per cents	"	"	"	"	"	"
IMPORTS.						
Price Goods—	Market	Quiet.	Quiet.	Quiet.	Quiet.	Quiet.
Grey, Shirtings	7th. 38-39 inches (12×11 to 13×12)	Rs. 3-4	Rs. 3-4	Rs. 3-4	Rs. 3-4	Rs. 3-4
" "	8th 38-39 inches (12×12 to 16×14)	" 3-13	" 3-14	" 3-14	" 3-14	" 3-14
" Madapollams	3th. 32 inches (10×10 to 12×10)	" 1-5	" 1-5	" 1-5	" 1-5	" 1-5
Mule Twist, No. 40s per lb.	"	As. 8 to 8½	As. 8 to 8½	As. 8 to 8½	As. 8 to 8½	As. 8 to 8½
Water Twist No. 30s	"	" 8 to 8½	" 8 to 8½	" 8 to 8½	" 8 to 8½	" 8 to 8½
Copper (Braziers) per cwt.	"	Rs. 46½	Rs. 46½	Rs. 46½	Rs. 46½	Rs. 46½
Yellow Metal	"	" 35	" 35	" 35	" 35	" 35
Welsh Bar Iron (per candy)	"	" 27 to 28	" 27 to 28	" 27 to 28	" 27 to 28	" 27 to 28
Staffordshire Bar Iron	"	" 30 to 32	" 30 to 31	" 30 to 31	" 32 to 34	" 31 to 32
Swedish Bar Iron	"	" 41 to 44	" 41 to 45	" 41 to 45	" 41 to 45	" 40 to 45
Davidson's West Hartley Coal (per ton)	"	17	17	17	17½	17
Welsh Hartley Coal	"	" 15	" 15½	" 15½	" 15½	" 16
Cardiff	"	" 16	" 16½	" 16½	" 16½	" 17½

WEEKLY CURRENT QUOTATIONS for the Year 1883—continued.

QUOTATIONS.		Week ending 29th November.	Week ending 6th December.	Week ending 13th December.	Week ending 20th December.	Week ending 27th December.
EXCHANGE.						
On England, Bank Bills	Sight	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 3 m'ths "		1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 4 " "		1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 6 " "		1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
First-class Credits	3 " "	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 6 " "		1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
Documents	3 " "	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
" " 6 " "		1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.	1s. 7½d.
Paris France Mercan- tile Bills	3 " "	2-07½	2-08	2-08½	2-08½	2-08
Banks, Calcutta, on Demand	" " "	100½	100½	100½	100½	100½
China Mercantile Bills, 60 days' Sight	" " "	223	223	223	223	223
English Bar Gold, 100 touch (per tola)		Rs. 19.14.9	Rs. 19.12.6	Rs. 19.12.3	Rs. 19.12.3	Rs. 19.12
Sovereigns	" " "	" 12-6-9	" 12-6	" 12-6	" 12-5-9	" 12-6
RATES OF DISCOUNT.						
Bank Rate of Discount on Private Bills		7 per cent.	7 per cent.	7 per cent.	7 per cent.	8 per cent.
" of Interest on Demand on Government Securities.		5 "	5 "	5 "	5 "	6 "
GOVERNMENT SECURITIES.						
Four per cents.	" " "	98½	98½	98½	98	97½
Four-and-a-half per cents.	" " "	102½	102½	102½	102	101½
IMPORTS.						
Piece Goods—	Market	Quiet.	Quiet.	Quiet.	Quiet.	Quiet.
Grey Shirtings	7½b. 38-39in. (12×11 to 13×12)	Rs. 3-4	Rs. 3-4	Rs. 3-4	Rs. 3-4	Rs. 3-4
" " 8½b. 38-39in. (12×12 to 16×14)		" 3-13	" 3-12	" 3-12	" 3-12	" 3-10
" Madapolams	3½b. 32in. (10×10 to 12×10)	" 1-5	" 1-5	" 1-5	" 1-5	" 1-5
Mule Twist, No. 40s per lb.	" " "	As. 8 to 8½	As. 8 to 8½	As. 8 to 8½	As. 8 to 8½	As. 8 to 8½
Water " No. 30s "	" " "	8½ to 8½	" 8 to 8½	" 8 to 8½	" 8 to 8½	" 8 to 8½
Copper (Braziers), per cwt.	" " "	Rs. 45½	Rs. 45	Rs. 44½	Rs. 44½	Rs. 44
Yellow Metal	" " "	" 34½	" 34½	" 34½	" 34½	" 33½
Welsh Bar Iron, per cwt.	" " "	" 28 to 29	" 28 to 29	" 28 to 29	" 28 to 29	" 28 to 29
Staffordshire Bar Iron, per cwt.	" " "	" 32 to 33	" 32 to 34	" 32 to 33	" 32 to 33	" 32 to 33
Swedish Bar Iron	" " "	" 40 to 46	" 41 to 45	" 40 to 45	" 40 to 45	" 40 to 45
Davison's West Hartley Coal (per ton)	" " "	" 17½	" 18½	" 18½	" 17 Dec. S'ment.	" 17 Dec. S'ment.
Welsh Hartley Coal (per ton)	" " "	" 16½	" 17½	" 17½	" 16½	" 16
Cardiff Coal (per ton)	" " "	" 18½	" 19½	" 19½	" 18½	" 18½

APPENDIX QQ.

STATEMENT showing the Annual Value of the Export and Import Trade of India, and the Total Miles of Railway opened, in the Official Years 1852-53 to 1882-83.

Year	EXPORTS.			Total Miles of Railway opened.	Merchandise.		Treasure.	Merchandise and Treasure.	
	1852-53	1853-54	1854-55		£	£		£	£
"	...	...	...	21½	20,464,633	1,055,229	1,055,229	21,519,862	
"	...	...	...	72	19,295,139	1,483,296	1,483,296	20,778,435	
"	...	...	...	171	18,927,222	1,267,033	1,267,033	20,194,255	
"	...	...	...	274½	23,040,000	601,177	601,177	23,641,177	
"	...	...	...	289½	25,340,000	1,253,426	1,253,426	26,593,426	
"	...	...	...	430½	27,460,000	822,438	822,438	28,282,438	
"	...	...	...	625	29,860,000	669,427	669,427	30,529,427	
"	...	...	...	836½	27,960,000	929,007	929,007	28,889,007	
"	...	...	...	1581½	32,970,000	1,119,549	1,119,549	34,089,549	
"	...	...	...	2351½	36,320,000	683,355	683,355	37,003,355	
"	...	...	...	2516½	*47,860,000	1,111,140	1,111,140	48,971,140	
"	...	...	...	2962½	*65,625,000	1,270,435	1,270,435	66,895,435	
"	...	...	...	3368½	*68,025,000	1,444,775	1,444,775	69,469,775	
"	...	...	...	3568	*65,490,000	2,165,352	2,165,352	67,655,352	
"	...	...	...	3936½	41,860,000	2,431,503	2,431,503	44,291,503	
"	...	...	...	4016½	50,875,000	1,571,946	1,571,946	52,446,946	
"	...	...	...	4261	53,060,000	1,395,580	1,395,580	54,455,580	
"	...	...	...	4766	52,470,000	1,042,353	1,042,353	53,512,353	
"	...	...	...	5072	55,335,000	2,220,765	2,220,765	57,555,765	
"	...	...	...	5365½	63,190,000	1,495,642	1,495,642	64,685,642	
"	...	...	...	5671½	55,230,000	1,308,579	1,308,579	56,538,579	
"	...	...	...	6201	54,980,000	1,958,512	1,958,512	56,938,519	
"	...	...	...	6497½	56,360,000	1,625,309	1,625,309	57,985,309	
"	...	...	...	6949½	56,210,000	2,200,236	2,200,236	58,410,236	
"	...	...	...	7326½	61,013,000	4,029,898	4,029,898	65,042,898	
"	...	...	...	8216	65,222,000	2,210,995	2,210,995	67,432,995	
"	...	...	...	8477½	60,937,000	3,982,228	3,982,228	64,919,228	
"	...	...	...	9325	67,210,000	2,035,147	2,035,147	69,245,147	
"	...	...	...	9875	74,541,000	1,440,400	1,440,400	75,981,400	
"	...	...	...	10144½	81,966,000	1,099,700	1,099,700	83,065,700	
"	...	...	...		83,485,000	1,041,800	1,041,800	84,526,800	

* Exports abnormally high owing to the American Civil War.

Year	IMPORTS.					Total Miles of Railway opened.	Merchandise.		Treasure.	Merchandise and Treasure.	
	...	...	...	...	...		£	£		£	£
1852-53	...	...	...	...	...	21½	10,070,861	6,831,377	16,902,238	...	...
" 1853-54	...	...	...	...	...	72	10,070,863	4,871,956	14,942,819	...	...
" 1854-55	...	...	...	...	...	171	12,742,671	2,028,256	14,770,927	...	...
" 1855-56	...	...	...	...	...	274½	13,945,000	11,301,288	25,246,288	...	...
" 1856-57	...	...	...	...	...	289½	14,195,000	14,413,697	28,608,697	...	...
" 1857-58	...	...	...	...	...	430½	15,275,000	15,815,436	31,090,436	...	...
" 1858-59	...	...	...	...	...	625	21,730,000	12,817,071	34,547,071	...	...
" 1859-60	...	...	...	...	...	836½	24,265,000	16,356,963	40,621,963	...	...
" 1860-61	...	...	...	...	...	1581½	23,495,000	10,677,077	34,172,077	...	...
" 1861-62	...	...	...	...	...	2351½	22,320,000	14,951,985	37,271,985	...	...
" 1862-63	...	...	...	...	...	2516½	22,630,000	20,508,967	43,138,967	...	...
" 1863-64	...	...	...	...	...	2962½	27,145,000	22,962,581	50,107,581	...	...
" 1864-65	...	...	...	...	...	3368½	28,150,000	21,363,325	49,513,325	...	...
" 1865-66	...	...	...	...	...	3568	29,600,000	29,577,301	59,157,301	...	...
" 1866-67	...	...	...	...	...	3936½	29,040,000	13,236,905	42,276,905	...	...
" 1867-68	...	...	...	...	...	4016½	35,705,000	11,775,374	47,480,374	...	...
" 1868-69	...	...	...	...	...	4261	35,990,000	15,155,954	51,145,954	...	...
" 1869-70	...	...	...	...	...	4766	32,925,000	13,954,807	46,879,807	...	...
" 1870-71	...	...	...	...	...	5072	34,470,000	6,444,823	39,914,823	...	...
" 1871-72	...	...	...	...	...	5365½	32,090,000	11,573,813	43,663,813	...	...
" 1872-73	...	...	...	...	...	5671½	31,875,000	4,556,585	36,431,585	...	...
" 1873-74	...	...	...	...	...	6201	33,835,000	5,792,534	39,627,534	...	...
" 1874-75	...	...	...	...	...	6497½	36,220,000	8,141,047	44,361,047	...	...
" 1875-76	...	...	...	...	...	6949½	38,515,000	5,300,722	43,815,722	...	...
" 1876-77	...	...	...	...	...	7326½	37,440,000	11,436,120	48,876,120	...	...
" 1877-78	...	...	...	...	...	8216	41,464,000	17,355,459	58,819,459	...	...
" 1878-79	...	...	...	...	...	8477½	37,801,000	7,056,748	44,857,748	...	...
" 1879-80	...	...	...	...	...	8325	41,172,000	11,654,894	52,826,894	...	...
" 1880-81	...	...	...	...	...	9875	53,086,800	8,997,200	62,084,000	...	...
" 1881-82	...	...	...	...	...	10144½	49,113,000	11,322,800	60,435,800	...	...
" 1882-83	...	...	...	...	...		52,098,700	13,453,400	65,552,100	...	...

APPENDIX RR.

FOREIGN TRADE OF BRITISH INDIA.

Summary of Imports and Exports in the Official Years 1877-78 to 1882-83.

IMPORTS—		1877-78.	1878-79.	1879-80.	1880-81.	1881-82.	1882-83.
Merchandise, Private.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Bengal	...	19,38,54,456	16,61,18,220	18,67,45,566	22,26,42,843	20,44,10,589	21,12,01,418
Bombay	...	14,07,61,248	13,49,15,989	14,10,73,890	19,24,61,510	18,14,37,616	19,39,41,774
Sindh	...	39,01,607	53,46,873	81,35,107	1,14,52,571	1,22,74,791	1,18,68,556
Madras	...	8,25,60,386	2,99,20,612	3,15,82,658	8,82,74,894	8,88,60,546	4,58,33,679
British Burmah	...	2,21,82,383	2,94,28,405	2,97,95,226	3,79,56,933	3,29,33,009	3,72,34,234
Total...		39,32,60,030	36,57,30,099	39,73,32,447	50,27,88,751	46,99,16,551	50,00,79,661
Ditto Government Stores...	...	2,13,81,821	1,22,79,736	1,43,93,224	2,80,79,323	2,12,12,173	2,09,07,059
Total Merchandise...		41,46,41,851	37,80,09,835	41,17,25,671	53,08,68,074	49,11,22,724	52,09,86,720
Treasure, Private.							
Bengal	...	4,96,33,992	1,32,08,438	8,10,40,893	1,83,55,491	1,92,21,391	2,29,82,883
Bombay	...	11,95,97,164	4,85,74,636	8,02,53,487	6,71,91,895	9,01,53,300	10,72,74,411
Sindh	...	9,750	31,100	3,04,149	99,929	49,625	3,22,028
Madras	...	36,64,109	33,91,229	44,07,598	88,18,794	32,86,965	34,55,882
British Burmah	...	6,49,581	3,67,083	5,42,821	5,06,530	5,16,523	4,98,438
Total...		17,35,54,596	7,05,67,486	11,65,48,948	8,99,72,139	11,32,27,804	13,45,33,612
Ditto Government...	...	.....	.....	.....	.....	.....	.....
Total Treasure...		17,35,54,596	7,05,67,486	11,65,48,948	8,99,72,139	11,32,27,804	13,45,33,612
Grand Total of Imports...		58,81,96,447	44,85,77,321	52,82,74,619	62,08,40,213	60,43,56,528	65,55,20,362
EXPORTS—							
Merchandise, Private.							
(Foreign Goods.)							
Bengal	...	15,21,008	10,33,072	8,65,008	11,84,186	9,53,773	10,54,037
Bombay	...	1,81,45,416	1,99,09,361	1,97,46,726	2,19,57,872	2,26,57,532	2,44,73,208

Sindh	...	...	...	1,65,076	2,66,071	10,90,805	17,31,180	22,56,026	19,00,751
Madras	...	...	...	5,25,312	5,62,937	4,10,769	4,73,029	3,98,060	3,32,399
British Burmah	...	...	...	64,958	79,630	1,15,760	2,04,506	2,03,325	*2,58,768
Total...				2,04,21,800	2,18,51,571	2,22,29,068	2,55,50,773	2,64,69,216	2,80,24,163
(Indian Produce and Manufactures.)									
Bengal	...	...	...	31,06,87,132	29,21,00,984	30,28,96,476	33,17,01,748	33,96,69,167	34,03,99,712
Bombay	...	...	...	20,28,08,409	16,99,91,576	20,57,94,441	24,39,12,453	29,41,51,191	28,90,86,889
Sindh	...	...	...	1,62,99,497	94,49,231	1,26,12,676	87,20,425	1,76,86,803	2,43,59,327
Madras	...	...	...	5,51,25,530	6,22,40,867	7,12,62,827	6,98,89,082	7,54,79,479	8,20,69,333
British Burmah	...	...	...	4,65,14,764	5,32,95,517	5,69,19,872	6,54,05,088	6,55,43,335	7,00,67,370
Total...				63,14,35,332	58,70,78,175	64,94,86,292	71,96,28,796	79,25,29,975	80,59,82,631
Total Fgn. & Indian Merchandise exported.									
Bengal	...	...	...	31,22,08,140	29,31,34,056	30,37,61,484	33,28,85,984	34,06,22,940	34,14,53,749
Bombay	...	...	...	22,09,53,825	18,99,01,437	22,55,41,167	26,58,70,325	31,68,08,723	31,35,65,097
Sindh	...	...	...	1,64,64,573	97,15,802	1,37,03,481	1,04,51,605	1,99,42,829	2,62,60,078
Madras	...	...	...	5,56,50,842	6,28,03,804	7,16,73,596	7,03,62,111	7,58,77,539	8,24,01,732
British Burmah	...	...	...	4,65,79,752	5,33,75,147	5,70,35,632	6,56,09,594	6,57,47,160	7,03,26,138
Total...				65,18,57,132	60,89,29,746	67,17,15,360	74,51,79,569	81,89,99,191	83,40,06,794
Ditto Government Stores									
	...	...	...	8,66,150	4,39,023	3,92,046	2,29,503	6,64,911	8,42,578
Total Merchandise...				65,22,23,282	60,93,68,769	67,21,07,406	74,54,09,072	81,96,64,102	83,48,49,372
Treasure, Private.									
Bengal	...	...	...	4,47,096	53,65,973	32,76,911	22,01,018	21,55,826	28,76,734
Bombay	...	...	...	1,78,19,089	3,07,97,155	1,29,88,488	88,06,624	57,01,723	50,11,301
Sindh	...	...	...	1,74,625	3,16,301	2,11,640	2,33,860	5,18,905	4,20,700
Madras	...	...	...	29,95,073	23,91,094	27,17,273	28,09,761	25,47,914	14,28,641
British Burmah	...	...	...	1,24,523	84,930	93,967	42,770	50,100	69,112
Total...				2,15,51,356	3,89,55,453	1,92,88,279	1,40,94,033	1,09,73,868	98,06,488
Ditto Government...									
	...	...	...	5,58,600	8,66,830	10,63,200	3,10,375	23,600	6,12,000
Total Treasure...				2,21,09,956	3,98,22,283	2,03,51,479	1,44,04,408	1,09,97,468	1,04,18,488
Grand Total of Exports...				67,43,33,238	64,91,91,052	69,24,58,885	75,98,13,480	83,06,61,570	84,52,67,860

APPENDIX SS.

FOREIGN TRADE OF THE BOMBAY PRESIDENCY.—IMPORTS.

Principal Articles, including Treasure, imported in the Official Years 1878-79 to 1882-83.

ARTICLES.	1878-79.	1879-80.	1880-81.	1881-82.	1882-83.
Apparel, &c. ...	Rs. 16,17,975	Rs. 16,79,527	Rs. 22,41,861	Rs. 23,61,224	Rs. 26,70,431
Arms, Ammunition, &c. ...	2,35,691	3,27,063	2,74,291	8,53,162	8,15,277
Building and Engineering Materials ...	2,49,500	3,42,077	3,92,871	2,45,626	3,08,277
Cabinet ware and Furniture ...	58,085	80,814	1,38,568	1,64,606	2,12,572
Candles ...	1,40,085	2,26,929	1,33,901	1,90,799	2,26,058
Clocks and Watches ...	2,11,003	2,96,389	4,53,892	4,47,496	4,97,861
Coal ...	64,72,962	76,20,333	88,73,970	62,70,825	66,45,765
Cotton Twist and Yarn ...	57,04,629	70,33,970	93,00,947	96,48,512	89,66,348
Do. Piece Goods ...	4,07,73,943	4,86,59,906	7,30,32,608	7,02,18,838	7,19,49,765
Chemical Products and Preparations ...	4,62,828	4,35,274	6,74,586	5,82,272	5,61,818
Drugs and Medicines ...	11,79,155	12,85,145	15,33,220	15,30,539	16,81,778
Dyeing and Colouring Materials ...	7,74,993	11,09,627	17,45,700	13,28,501	15,82,269
Earthenware and Porcelain ...	3,19,932	3,09,139	4,21,134	5,54,175	4,77,675
Fireworks ...	2,51,348	2,75,506	1,74,912	2,90,119	3,50,961
Glass ...	15,47,851	14,76,588	19,54,638	23,59,538	25,01,987
Gums and Resins ...	4,80,251	6,53,312	10,19,173	10,60,572	7,78,025
Hardware and Cutlery ...	16,07,873	16,15,578	23,11,680	24,50,042	34,55,796
Hides and Skins ...	1,37,899	1,63,579	2,78,986	2,54,062	2,50,479
Instruments and Apparatus ...	2,82,796	3,04,397	4,06,044	6,15,854	7,59,902
Ivory and Ivory ware ...	17,02,880	18,46,238	21,08,419	22,58,741	21,20,227
Jewellery, &c. ...	13,58,376	15,16,625	14,94,167	14,49,354	20,05,257
Leather ...	4,29,304	5,47,189	7,91,441	9,97,904	9,88,331
Liquors—Ale, Beer, and Porter ...	4,87,509	5,18,265	4,88,153	5,37,655	4,75,586
Do. Spirits ...	10,32,345	12,50,224	12,42,623	13,18,190	13,83,587
Do. Wines and Liqueurs ...	9,65,080	8,83,363	10,79,808	11,40,243	10,61,899
Do. Other sorts ...	...	...	...	...	...
Machinery and Millwork ...	38,28,905	20,94,333	23,73,628	52,28,441	50,70,184
Matches, Lucifer and other ...	3,12,179	3,38,611	4,38,038	5,20,518	5,32,327

FOREIGN TRADE OF THE BOMBAY PRESIDENCY.—EXPORTS,
Principal Articles, including Treasure, exported in the Official Years 1878-79 to 1882-83.

ARTICLES.	1878-79.		1879-80.		1880-81.		1881-82.		1882-83.	
	INDIAN PRODUCE.		Rs.		Rs.		Rs.		Rs.	
Coffee	...	...	...	...	11,26,203	19,39,707	16,80,837	16,79,039	13,97,569	
Cotton—Raw	...	...	...	...	5,69,88,156	7,57,14,996	9,77,71,855	11,88,21,738	12,89,24,561	
Do. Twist and Yarn	...	...	...	...	88,36,653	1,09,01,400	1,26,00,948	1,92,39,274	1,70,59,783	
Do. Piece Goods	...	...	...	...	26,72,266	29,88,427	35,79,555	34,79,913	44,69,681	
Dyeing and Colouring Materials	...	...	...	...	13,77,259	22,65,449	13,87,594	19,43,166	22,94,353	
Grain and Pulse... ..	...	...	...	...	43,98,753	61,78,466	2,27,83,939	5,50,42,070	3,29,07,533	
Hides and Skins	...	...	...	...	29,11,032	24,27,362	34,85,191	44,91,738	41,93,689	
Oils	...	...	...	...	9,02,546	7,66,446	7,04,837	5,39,301	5,64,838	
Opium	...	...	...	...	6,25,15,271	7,44,77,255	5,90,31,135	4,95,82,848	4,64,72,929	
Seeds	...	...	...	...	1,18,09,172	1,11,13,215	2,12,60,806	2,88,57,831	3,39,78,359	
Spices	...	...	...	...	12,58,114	19,11,517	12,87,094	10,11,483	9,77,564	
Tobacco	...	...	...	...	...	...	...	515,519	4,75,870	
Wool—Raw	...	...	...	...	71,71,046	82,59,667	93,36,046	72,86,330	71,08,017	
Do. Manufactures—Shawls... ..	...	...	...	...	11,46,484	8,38,905	14,54,432	11,97,265	7,53,034	
All other Articles	...	...	...	...	63,97,410	66,07,863	75,84,771	64,23,737	75,29,617	
Total...	16,94,50,370		20,57,90,675		24,39,48,950		29,41,10,952		28,91,07,397	

FOREIGN PRODUCE.								
Cotton—Piece Goods	...	...	...	1,07,48,030	1,02,93,054	1,11,11,109	1,24,09,288	1,29,48,376
Do. Twist and Yarn	...	...	...	4,60,858	4,85,095	4,25,255	4,95,155	5,36,616
Gums and Resins	...	...	...	2,70,483	4,42,436	5,02,436	6,65,024	4,73,284
Ivory, unmanufactured...	...	...	...	9,47,068	9,04,824	8,73,014	9,19,871	10,60,955
Provisions	...	...	...	9,47,686	9,32,563	9,80,011	9,39,989	8,96,715
Silk—Raw	...	...	...	5,35,138	8,78,809	6,97,757	5,49,723	5,24,500
Do. Piece Goods	...	...	...	1,77,728	1,97,337	2,41,187	2,43,707	2,42,525
Sugar—Refined and Unrefined	...	...	...	14,57,511	8,28,424	19,37,846	12,37,024	17,99,798
Tea	...	...	...	3,14,196	2,11,840	4,55,219	4,53,984	3,85,408
Wool—Raw	...	...	...	5,12,369	9,18,102	4,55,390	3,71,724	5,14,720
Do. Piece Goods	...	...	...	89,306	1,00,648	1,41,472	1,55,367	1,50,046
All other Articles	...	...	...	34,54,700	35,47,800	41,56,942	42,16,020	49,48,033
Total...	...	...	...	1,99,15,073	1,97,40,932	2,19,77,638	2,26,56,826	2,44,80,976
Treasure—Gold	...	...	...	2,27,63,724	29,19,541	71,375	47,992	11,38,965
Do. Silver	...	...	...	80,83,431	1,00,68,947	87,32,999	56,49,621	38,71,436
Total Treasure...	...	...	...	3,07,97,155	1,29,88,488	88,04,374	56,97,613	50,10,401
Grand Total...	...	...	...	22,01,62,598	23,85,20,095	27,47,30,962	32,24,65,891	31,85,98,774

WORKING DAYS UNDER A CHARTER-PARTY.

A *Gazette Extraordinary* of the Bombay Government directed the public offices in Bombay to be closed after 2 p. m. on the 21st November 1883, and the 22nd November to be observed as a public "holiday" throughout the Presidency, in honour of the arrival of the Duke and Duchess of Connaught.

The charter-party, on the construction of which the decision of this case depended, was entered into in London on 28th June 1883, between the agents of the owners and the agents of the plaintiffs. Clause I. of the charter-party provided for the Charter of the whole ship to load at Bombay in the Prince's Dock from the charterers or their agents. Clause 4 allowed 12 working days (Sundays and holidays excepted), for the charterers to load the steamer at Bombay after written notice of the steamer being ready to load. Clauses 12 and 16 provided for the observance of the customs of the Port in loading and discharging cargo.

The plaintiffs, *i.e.* the charterers, contended that the 22nd November was a "holiday," and therefore by the express terms of the charter-party excluded from the 12 working days within which they were bound to load, or at any rate that it was not a "working day," and therefore they could not be held liable for demurrage in respect of it.

His Honor held that the 22nd November 1883 was a working day within the meaning of the said charter-party.

JUDGMENT.

(Before Mr. W. E. HART, CHIEF JUDGE.)

LANG, MOIR AND CO. *vs.* SIR CHARLES FORBES AND CO.

Mr. Payne, of Messrs. Payne, Gilbert and Sayani, appeared for the plaintiffs; Mr. Brown, of Messrs. Hore, Conroy and Brown, appeared for the defendants. This was an action to recover from the defendants, who were the agents of the owners of the *s.s.* *Inchmarree*, the sum of Rs. 529-11-2 which the plaintiffs as charterers of the vessel had paid to the defendants, who claimed the amount as demurrage for the 22nd November, 1883.

In delivering judgment his Honour said the plaintiffs in this case sue to recover from the defendants as agents of the owners of the *s.s.* *Inchmarree* the sum of Rs. 529-11-2 (being the equivalent of £42-18) which was paid under protest by the plaintiffs as charterers on an alleged claim for demurrage of the steamer during the 22nd November, 1883. The charter-party, on the construction of which the decision of this case depends, was entered into in London on 28th June,

1883, between Messrs. H. Clarkson and Co. as agents of the owners, and Messrs. Stephen Kennard and Co., who are said to have acted for the plaintiffs. The charter-party is in a printed form. Clause 1 provides for the charter of the whole ship to load at Bombay in the Prince's Dock from the charterers or their agents at a freight of 28s. 9d., all to be computed according to the Bombay Chamber of Commerce steamer tonnage scale, measurement goods to be measured by the Bombay Chamber of Commerce measurers as customary. Clause 4 allows 12 working days (Sundays and holidays excepted) for the charterers to load the steamer at Bombay after written notice of the steamer being ready to load. Clauses 12 and 16 provide for the observance of the customs of the ports in loading and discharging cargo. On the 6th November, 1883, a *Gazette Extraordinary* of the Bombay Government was issued giving direction for the reception of the Duke and Duchess of Connaught on their arrival in Bombay. Paras. 1 to 5 relate to the duties on the occasion of the Naval, Military and Government officers, para. 6 to the presentation of an address by the Municipality, paras. 7 and 8 to the arrangements for the escort of their Royal Highnesses to Parel and their reception there. Para. 9 is in these words: "His Excellency in Council feels assured that Her Majesty's subjects in Bombay, both European and native, will gladly avail themselves of the opportunity to testify their loyalty to Her Majesty the Queen-Empress and respect for their Royal Highnesses; and para. 10 states, "In honour of the occasion the Right Honourable the Governor-in-Council is pleased to direct that the public offices in Bombay shall be closed after 2 p.m. on the 20th and on the 21st, which shall be observed as a public holiday throughout the Presidency." On the 17th November, 1883, a second *Gazette Extraordinary* was issued, in consequence of the detention of the s.s. Cathay, by which their Royal Highnesses were to arrive, directing the public offices to be closed after 2 p.m. on the 21st instead of the 20th, and the 22nd instead of the 21st to be observed as a public holiday. Besides those noticed above, the facts bearing on the case will have been admitted or proved are, first, that all goods have to be passed through the Custom House before they can be shipped, but a pass when once it is obtained is not restricted in its operation to any particular day, but remains available for any time till the steamer sails. Second, that from 2 p.m. on the 21st and on the 22nd November the Custom House in Bombay was entirely closed as on Sundays, but ordinarily on Saturdays is open for passing goods till 5 p.m. Third, that on 22nd November no extra fees were charged by the Prince's Dock as on Sundays, Christmas day, New Year's day, Good Friday, and the Queen's birthday. Fourth, that on 22nd November, other steamers loaded cargo sent on that day, and the plaintiffs sent down some goods to be shipped on board the Inchmarree on the following day which were, however, taken on board that day. Fifth, that in July, 1881, at a special general meeting of the Chamber of Commerce it was decided that the holidays under charter-parties should be New Year's day 1 day, Holi 2 days, Easter 2 days, Queen's birthday 1 day, Coconut day 1 day, Janma Ashtami 1 day, Pateti 1 day, Dussera 1 day, Dewali 2 days, Christmas 2 days, and Mohorrum 2 days. Sixth, that both the plaintiffs and defendants, but neither of the executing parties to the charter-party, nor the captain of the Inchmarree, are members of the Bombay Chamber of Commerce. Seventh, that on 2nd November the plaintiffs informed

the captain of the *Inchmarree* that Thursday, the 22nd instant, having been announced as a holiday in Bombay by the Government of Bombay in the *Government Gazette*, that day counts as a legal holiday under your charter-party and will not be considered as a working day." Under these circumstances the plaintiffs contend that the 22nd November was a "holiday," and therefore by the express terms of the charter-party excluded from the 12 working days within which they were bound to load, or at any rate that it was not a "working day," and therefore they cannot be held liable for demurrage in respect of it. In support of their contention on the first point they rely mainly on the ordinary meaning of the word holiday as a day in which no work is done, and the fact evidenced by the publication of the notifications in the *Government Gazette*, that the 22nd November was observed as a holiday by the majority of the community in Bombay. In support of their contention on the second point, plaintiffs rely mainly on the closing of the Custom House on 22nd November. The defendants, on the other hand, contend that the 22nd November was not a holiday within the terms of the exception in the charter-party which was inserted as explanatory merely of the term "working days," that the word "holidays" in that exception must be taken to mean the holidays specified by the Chamber of Commerce in July 1881, that the Government had neither the power nor the wish by notification to create a holiday not in the contemplation of the parties at the time of making the contract; that the word holiday imports some idea of religious sanctity, not merely of festal recreation; that the 22nd November was admittedly treated as an ordinary working day by the Prince's Dock, by other charterers and to some extent by plaintiffs themselves, and that the closing of the Custom House on 22nd November affords no ground for plaintiffs' contention, because it had been admittedly closed from 2 p.m. on the previous day, which it had never been contended, was not a working day throughout. As to the effect of the notification in the *Government Gazette*, I have no doubt that it neither operates, nor purports to insert an additional term into this charter-party. Paragraph 9 simply amounts to an invitation to the general public of Bombay to testify their loyalty and respect by joining in the holiday which paragraph 10 makes compulsory only in Government offices throughout the Presidency. So, too, I am of opinion that the resolution of the Bombay Chamber of Commerce is nothing more than a recommendation that certain days should be regarded as holidays, but does not prevent other days also being so regarded if that appears to have been the intention of the parties. The question still remains whether a holiday so ordered, on the one hand, or so omitted, on the other hand, was one of the holidays contemplated by the exception in the charter-party. To answer it we are driven to a construction of the terms of that contract, and a consideration of the intention of the parties at the time they entered into it. There are seven well known canons of most general applicability in the construction of contracts. First, that the contract shall be reasonably construed according to the intention of the parties: second, that the construction shall be liberal the terms used being understood in their most comprehensive sense, unless there be something to show that the parties intended to employ them in a more restricted sense: third, that the construction shall be

favourable, so as to support the agreement if possible : fourth, that the words used shall be understood in their plain ordinary and *popular sense*, unless it be clear from subject matter or context that they are to be understood in some special sense : fifth, that even in construing an isolated provision the *whole contract* must be considered in endeavouring to collect the intention of the parties : sixth, that contracts for performance abroad are to be considered according to the law and usage of the *place of performance* : and seventh, that an instrument shall be construed most strongly *against the grantor*. All of these canons seems to be applicable in the present case except the third. Now even if we apply the second, fourth and seventh against the defendants, that is, if we put the most liberal and popular construction on the word "holidays" against the interest of the owners demising the ship, still it seems to me that construction cannot be upheld if it appears, under the first canon, to have been the intention of the parties at the time of making the contract, as ascertained under the fifth and sixth canons, that such a holiday as that of 22nd November should be reckoned as a lay day. Let us look first to the circumstances under which the contract was entered into. It was executed in London on the 28th June. That is at a place and time when the parties could not have had expressly in their minds the observance of this particular day (the 22nd November) as a holiday on account of the arrival of the Duke and Duchess of Connaught at Bombay. The most that can be said is that they had it generally in their minds to exclude from the working days all days generally regarded as holidays in Bombay. Then the question suggests itself did they intend to exclude only those days which at the time of the contract were generally regarded as holidays, are all those days also which in the future might be so observed for any reason whatever ? I confess the latter branch of the hypothesis seems to me very doubtful indeed. To put an extreme case, are we to suppose that the parties had in their minds at the time of the making of the contract the possibility of the Government of the country being made over, before its performance, to the Jews, and the consequent observance as holidays of all the Jewish sabbaths, besides the Christian Sundays, expressly excluded by the terms of the contract ? I am of opinion that the parties intended to exclude from the working days only Sundays and those days which at the time of the making of the contract were generally regarded as holidays in Bombay. This opinion, I think, derives some support from the form of the contract which we will next consider. It is in a printed form which must have been in existence before the parties met to enter into this particular agreement. Several of the clauses directly recognise the then existing customs of the port, expressed in certain specified instances by the usages of the Chamber of Commerce, but neither by the custom of the port of Bombay nor by the usage of the Chamber of Commerce, can it be said either that a day directed by Government by special proclamation to be observed as a public holiday in Government offices, or that a day on which the Custom House is wholly or partially closed, is a holiday within the meaning of this charter-party. For there was no evidence at all of the existence of any such custom or usage. Lastly, if we consider the behaviour of the parties themselves subsequently to the making of the contract as throwing some light on what they themselves considered the meaning of it to be, we shall again be

directed to the conclusion that they did not intend the exception of "holidays" in the charter-party to apply to the day in question. It is true that on 20th November, plaintiffs wrote to the captain of the Inchmarree that they do intend to regard the 22nd November as a holiday within the meaning of the charter-party. But a man's intentions are generally to be judged not so much by what he says as by what he does. We find the plaintiffs themselves sending cargo for the Inchmarree down to the Dock on the 22nd November. That is they are working themselves on that day in spite of its being, as they say, a "holiday." But it is, to say the least of it, difficult for a man who works himself on a certain day to persuade others that they ought to regard it as a holiday. If the 22nd of November was a holiday under the charter-party, it could be so only by reason of its being one of those days which in the contemplation of the parties to the contract was to be regarded as a holiday in Bombay. But we find the plaintiffs, who stand in the place of one of the parties to the contract, themselves disregarding the day as a holiday in Bombay and working on it. That the captain of the ship did not regard the 22nd November as a holiday under his charter-party is clear from his shipping off that day all the cargo he could get in spite of the plaintiffs' letter of 20th November. On all these grounds the best conclusion at which I can arrive is that the 22nd November, 1883, does not fall within the term "holidays" excluded from the twelve working days allowed by the above-mentioned charter-party of 28th June, 1883. But a day though not a holiday may still not be a working day, *e. g.*, if as in a case tried by myself some years ago, it be proved to be the custom of the port that wet and stormy days during the monsoon are not to be reckoned as working days. In the present case, it is contended that the 22nd November cannot be reckoned as working day, because the Custom House was closed on it. But no custom of the port to this effect was proved. In fact the very document relied on by the plaintiffs at page 232 of the Report of the Chamber of Commerce for 1880-81 displaces the theory of the existence of any such universal immemorial custom having the force of law. On the other hand work actually was done on that day by several steamers in the dock the Custom House had been closed from 2 p.m. on the previous day, as to which no question of its being a working day arises. I must therefore also hold that the 22nd November, 1883, was a working day within the meaning of the said charter-party. The result is there must be a verdict for the defendants and I certify their attorney's costs, Rs. 34.



00133552

Digitized with financial assistance from
Government of Maharashtra
on 01 February, 2020

